



CITY OF NEW ORLEANS

Zika Virus Plan

April 18, 2016

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Introduction

In May 2015 the Pan American Health Organization (PAHO) issued an alert regarding the first confirmed local transmission cases of Zika Virus Disease (Zika) infection in Brazil. Subsequently, outbreaks are now occurring in many countries across the Americas. Although Zika infection rarely leads to severe illness, it has been found to cause birth defects such as microcephaly and has been associated the neuromuscular disorder Guillain-Barré syndrome. In response to this outbreak, the World Health Organization declared the Zika a Public Health Emergency of International Concern on February 1, 2016.

As of April 1, 2016 there is no local transmission of Zika virus in the U.S., however travel-related cases have been reported in most states including Louisiana. New Orleans is at high risk of Zika transmission as a tourist destination and port city, due to abundant *Aedes* mosquito vector populations. The Comprehensive Zika Plan provides guidelines for preparation and response to the virus in Orleans Parish.

The Comprehensive Zika Virus Plan provides direction for the prevention and mitigation of Zika virus in Orleans Parish. The plan discusses Zika virus management in three phases: no reported cases, travel-related cases, and local transmission. Within each phase, the components of vector control, public education & media, and interagency coordination are discussed.

Zika virus is a newly emerging virus and recent scientific information is continually becoming available. This document will be updated regularly to reflect additional information from peer-reviewed research, the Centers for Disease Control and Prevention (CDC), and other relevant organizations. More information is regularly becoming available at www.cdc.gov/zika.

Background

Zika is a mosquito-borne virus that is primarily transmitted to people through the bite of an infected *Aedes* mosquito vector. It is in the family Flaviviridae which also includes chikungunya, dengue and yellow fever viruses. Zika was first isolated in Uganda in 1947 and caused sporadic human cases in Africa and Southern Asia from the 1950s to 2000s. In 2007, an outbreak occurred on Yap Island of Micronesia which later spread to surrounding Pacific Islands in 2013-2014.

In May 2015, the Pan American Health Organization issued an alert regarding the first confirmed Zika virus infection in Brazil. Local transmission of the virus has spread rapidly in the Americas, and outbreaks are currently occurring in many countries. As of April 1, 2016 there have been 4 confirmed travel cases in the state of Louisiana. No local transmission of Zika virus by an infected mosquito has been confirmed in the continental United States but transmission has occurred through sexual contact with individuals who acquired the infection while traveling abroad.

Symptoms

Zika fever is a mosquito-borne viral disease caused by Zika virus. It consists of fever, rash, joint pain, conjunctivitis (red eyes), muscle pain and headache. Symptoms occur about 2-7 days after an infectious mosquito bite. One out of 5 people infected may develop symptoms, and the disease

is generally mild with symptoms that can last between 2-7 days. However, neurological and auto-immune complications (including Guillain-Barré Syndrome) were reported during large outbreaks in Brazil in 2015 and French Polynesia in 2013-2014. Guillain-Barré Syndrome is a rare disorder in which a person's own immune system damages their nerve cells causing muscle weakness and sometimes paralysis.

As of early April, Zika has been linked to birth defects including Microcephaly. Microcephaly is a birth defect where a baby's head is smaller than expected when compared to babies of the same sex and age. Babies with microcephaly often have smaller brains that might not have developed properly.

Prevention

Transmission of Zika virus is primarily through the bite of an infected *Aedes aegypti* (Yellow Fever mosquito) or *Aedes albopictus* (Asian Tiger mosquito). Zika-infected individuals have sufficient virus in their blood to infect a mosquito for roughly a week following the onset of symptoms. There have been documented cases of transmission during labor, blood transfusion, laboratory exposure, but these have been relatively infrequent mechanisms during previous outbreaks. Prolonged presence of virus in semen for weeks has been proven and there men are advised to practice safe sex if they have been exposed to Zika.

The CDC has issued a travel alert (Level 2 – Practice Enhanced Precautions) for people traveling to regions and countries where Zika virus transmission is ongoing and suggests that high risk populations may want to delay travel. The CDC recommends that travelers should protect themselves from mosquito bites and pregnant woman may want to consider postponing travel where Zika virus transmission is ongoing. Men who have traveled to affected areas should use condoms or abstain from sexual activity for 8 weeks after travel. Men who had symptoms of Zika while or after traveling should use condoms or abstain from sexual activity for 6 months. Men with pregnant partners are encouraged to use condoms throughout the duration of the pregnancy.

If travel is unavoidable, consultation with a physician and strictly avoiding mosquito bites during the trip is recommended. It is advised that personal protection measures such as applying insect repellent, wearing clothes that protect as much of the body as possible, and using physical barriers against mosquitoes are used. This includes window and door screens and mosquito nets when sleeping, especially during at dawn and dusk when *Aedes* mosquitoes are the most active. Protection against mosquito bites should also be advised for infected individuals until they are no longer infectious, approximately 1 week following the onset of symptoms.

Sexual Transmission

More research is showing that Zika can be sexually transmitted by men through semen and there have been cases of sexual transmission in the United States. There is currently no evidence that women can transmit Zika sexually. Condoms are recommended for use during all sexual activity including vaginal, anal and oral sex.

Testing

Suspected cases must be reported to the Louisiana Department of Health and Hospitals Infectious Disease Epidemiology Section (IDEpi) at which time epidemiologists will determine if testing is appropriate. The established protocol is that the State Public Health Laboratory will test the sample for virus and the antibody test will be performed by CDC.

Treatment

There is no vaccine or specific treatment for Zika virus. If infection is suspected, travel history should be shared with the healthcare provider. The CDC recommends treating the symptoms by resting, drinking fluids, and taking certain types of pain medicine. Some treatments for Guillain-Barré syndrome may help mitigate the paralysis but patients frequently require ICU care and subsequent physical therapy. There is no treatment to correct microcephaly.

Vectors

The primary means of transmission of Zika virus is through the bite of an infected *Aedes aegypti* (Yellow Fever mosquito) or *Aedes albopictus* (Asian Tiger mosquito). These are the same species of mosquitoes which transmit dengue, chikungunya and yellow fever. It takes approximately 10 days from the time a female mosquito bites a Zika-infected individual until the mosquito is infectious and can transmit the virus. This is referred to as the extrinsic incubation period. It is expected that the mosquito would remain infectious through the remainder of its life span.

These mosquitoes lay eggs singly along the waterline inside water-holding containers and have the ability to survive without water for several months. The eggs hatch after a rain event or re-flooding of the eggs. Therefore, it is important to eliminate potential breeding sites around households such as buckets, flower pots, discarded tires and any additional containers that can collect water. The eggs adhere to the containers so it is important to scrub containers that are refilled, such as bird baths, to remove the eggs. If the mosquito population is completely eliminated from an area, it can recover within 2 weeks as a result of egg hatching following a rainfall or containers refilling.

During the warmer months, these mosquitoes can complete their lifecycle (from egg to adult) in as little as a week. It is recommended that residents (owners and renters) inspect their property for standing water on a weekly basis to minimize breeding locations. These species can be active during the day, but are largely crepuscular (active in the twilight hours of dawn and dusk) when conditions are hot and dry. Each species has slightly different habitat preference but can commonly be found co-existing and breeding in the same areas and even the same containers.

Vector Control

NOMTCB is the lead agency for mosquito surveillance and control in New Orleans. The City of New Orleans has had an established mosquito control program since 1964. The agency utilizes an integrated mosquito management approach to vector control, consisting of vector population surveillance, public education, larval mosquito habitat reduction, biological control, and chemical control of larval and adult mosquitoes.

Integrated Mosquito Control

An integrated mosquito management approach is used by The City of New Orleans Mosquito, Termite and Rodent Control Board (NOMTCB). This involves vector population surveillance, public education, larval mosquito habitat reduction, and chemical control of larval and adult mosquitoes. Larval source reduction (i.e. the physical elimination of larval breeding sites) involves the inspection and removal of man-made containers (including tires), clutter and trash around residences. For sites that cannot be removed or drained, biorational larvicides are used to target developmental stages. Adult mosquitoes can be treated on a yard, block or residential level using a variety of equipment; backpack or hand-held sprayers, trucks and airplanes.

Monitoring/Surveillance

A thorough understanding of the basic biology of the pest species and the many factors that influence their density must be understood to effectively implement IPM for Mosquito Control. This is a continual process of monitoring, sampling and surveillance to observe changes in the mosquito population density, diversity, ecology, behavior, and arbovirus prevalence.

- Survey – one-time gathering of inspection data to assess a situation
- Surveillance – a continuing process to monitor changes in mosquito populations
 - Indicates when control measures are needed
 - Monitors effectiveness of these measures
 - Pinpoint time and species presence

The aim of vector and pathogen monitoring is to define the spatial and temporal risk of Zika transmission and to guide effective and efficient mosquito control interventions. Mosquito surveillance collections can target any life stage; egg, larvae, pupae, adult. A variety of methods have been developed and used to monitor population abundances of adult *Ae. aegypti* and *Ae. albopictus* mosquitoes in sufficient numbers for pathogen pooling and testing.

Mosquitoes

Vector population monitoring throughout Orleans Parish will continue. Efforts in high risk areas with abundant *Ae. aegypti* and *Ae. albopictus* populations will be increased.

Monitoring methods

- Ovitraps - small containers, usually plastic and black in color specifically designed to collect the eggs of *Aedes aegypti* and *Ae. albopictus* mosquitoes, plastic cups & seed germination paper.
- Container assessments - larvae & pupae collection from field, turkey basters/ pipettes, whirl-pack bags/ lidded containers, buckets for carrying samples, mosquito breeders for rearing in lab

- Calculation of infestation indices (Breteau, container, pupal) – accurate record of containers evaluated, location & numbering system for samples, datasheets, clipboards.
- Risk mapping – ARC GIS support, baseline larval habitat indices, sampling after intervention.

Adult mosquito collections

- *Passive* - BG Sentinel traps, CO₂-baited CDC light traps
- *Active*: Nasci or Prokopac aspirator vegetation sampling, human landing counts (suspended during high risk periods) Inspectors record the number and species of mosquitoes which land on themselves or a partner inspector in a specific period of time (usually 5 minutes). Care must be used not to use this technique when risk of arboviral transmission is high, but the method offers a quick assessment that can be used to evaluate the proper control strategy and treatment efficacy.

Requests for service from the public

- Service requests can also provide important information for making operational decisions. This is an opportunity to educate residents and to eliminate potential mosquito breeding sites around the home. Location data is recorded so that they can be geo-referenced (mapped) and used to target adulticide and larvicide applications. Standard inspection forms and door hangers are used to inform residents of actions taken in response. A script will be provided to 311 to provide the call agents information on commonly asked questions. However, agents will be instructed to forward all technical calls to NOMTCB at 658-2440. Agents are not to give mosquito control or medical advice.

Larval control

Larval surveys are conducted to locate the exact areas in which mosquitoes are breeding, estimate their relative abundance and to treat or eliminate larval habitats. Reducing populations of immature mosquitoes (larvae and pupae) reduces the reliance and expense of adulticides. Many larvicidal products are biorational and come in sustained released formulations. Larvicides are available in a variety of formulations such as briquettes, granules and oils and should be selected based on the type of treatment site as well as the duration of control needed.

- Larval inspections of urban sites. Inspect any containers holding water including rain barrels, tires, buckets, coolers, watering cans, flower pots, bird baths, pet dishes, trash, gutters and tree holes.
- Evaluate the data collected. Information should include if larvae and pupae collected, the type and size of container and mosquito species. Locations should be recorded to construct a map of positive larval sites for re-inspection when appropriate.

- Review data. Review the data to ensure that the most current and least ecologically impactful control strategy is used and that the efficacy has been evaluated. Larvicides are available in a variety of formulations and should be selected based on the site of treatment, the developmental stage targeted, and the duration of control needed.
- Review mapping of the sites once it has been completed.
- Biological control
 - Mosquito fish program. *Gambusia affinis* is a commonly used fish species which consume larvae, reproduce readily and are successful, long-term solution for mosquito control in permanent water habitats. The Louisiana Department of Wildlife & Fisheries permits release into man-made structures like fountains and pools but are prohibited from being released into natural water bodies.
 - Copepods. Copepods are small (0.5 -1.5 mm) crustaceans found naturally in marine and fresh water habitats. *Mesocyclops longisetus* and *Macrocyclus albidus* are aggressive species which can consume first and second instar mosquito larvae (>40 larvae/day). Successful control of *Ae. albopictus* and *Ae. aegypti* larvae has been achieved through the addition of copepods in containers such as tire, barrels and cisterns. Copepods have a varied diet allowing them to survive once mosquito larvae have been depleted and can tolerate dry periods. Door-to-door source reduction campaigns (habitat reduction & education), Involve community & neighborhood groups for sustained effect, community-wide events (such as waste tire collection)
 - CDC Fact Sheets <http://www.cdc.gov/zika/fs-posters/index.html>
 - EPA approved and registered larvicides used as needed. Larvicides have a variety of formulations and each type used will be based on the situation and need.
 - Ultra-low volume (ULV) larvicide application,
 - Truck - Grizzly ULV/ LV application unit with SmartFlow tracking
 - Aerial application – possible but can only be applied by helicopter over congested air space, NOMTCB does not have the capacity at this time
 - Granular or liquid larvicides
 - Back-pack application - Maruyama sprayer, granules Spheratax SPH® good for large, difficult to reach areas such as abandoned home with containers and tire piles
 - Can also be applied by hand directly to breeding sites

Adult Control

Adulticide applications are effective in causing a rapid reduction in the vector mosquito population but typically must be reapplied to have a sustained effect.

- Backpack
 - Device: SOLO or Stihl SR200 Backpack Spray Mister
 - Insecticide: Talstar® (bifenthrin)
- Aerial application
 - Device: Britten-Norman Islander Aircraft
 - Insecticide: Dibrom® (naled)
- Truck/ Ground ULV
 - Device: Ford F-150s with ULV units: Guardian 190ES with Monitor 4 tracking system, or Grizzly with SmartFlow tracking
 - Insecticide: Fyfanon ULV® (malathion)
- Pesticide rotation - use of different adulticides for additional modes of control including residual and knockdown
 - Scourge® (resmethrin), DeltaGard® (deltamethrin)
 - Permanone® (permethrin) - persistent

Monitoring Insecticide Susceptibility and Resistance

Repeated applications of insecticide can result in chemical tolerance, and there are several methods that can be utilized to test mosquito populations for resistance. It is important that testing is done continuously and if resistance is detected, changes should be made in response such as increased application rate or a change in the class or type of insecticide used.

- Bottle Bioassays – laboratory assay, conducted prior to and following the spray season determines baseline susceptibility and if there has been a change in insecticide resistance
- Cage tests – field test, using a cage of field-collected mosquitoes, and ground or aerial ULV equipment to determine spray efficacy

Bottle bioassays conducted by NOMTCB with local populations of *Ae. albopictus* and *Ae. aegypti* have determined susceptibility to insecticides currently in operational use in the district at application rates. Over the last two years, NOMTCB has evaluated the efficacy of the aerial and ground ULV (truck) against populations of *Aedes* mosquitoes. The results of these studies demonstrated 80-90% mortality in caged mosquitoes placed in open and sequestered locations in neighborhoods in Mid-City and the 7th Ward.

LDAF Compliance

The Louisiana Department of Agriculture and Forestry (LDAF) requires records be kept on pesticide applications including the site of application, specific chemical information and rate applied. LDAF provides "Pesticide Applicator Record Keeping forms" for use by certified applicators. Applications must be made in adherence to Louisiana Pesticide Law (L.R.S. 3:3201-3310), state pesticide regulations (LAC7:XXIII) and the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) and also under the rules set forth in the Louisiana Pollutant Discharge Elimination System General Permit (LAG870000) These records must be kept on file and

available for inspection at the NOMTCB Administration building. Only certified applicators will apply pesticides.

NOMTCB has a history of research and operational use of biological control agents including *Gambusia* (mosquito fish), copepods (small crustaceans) and *Toxorhynchites* (cannibal mosquitoes). In February, we began to increase the production of these at our Biological Control Laboratory in New Orleans East. Sustained control efforts will likely involve the experimental releases of biological control species in areas at higher risk such as those with frequent illegal waste tire dumping, prolonged tire storage or high number of containers positive for immature mosquitoes.

Phase 1: No Reported Cases

This section describes the actions that have taken place or will take place prior to a reported case of Zika virus infection in New Orleans.

Vector Control

The NOMTCB mosquito control program is active throughout the year. Cooler, winter and early spring consist of maintenance of equipment and preparing for the mosquito season. In 2013 – 2016, additional mosquito traps specific for *Aedes aegypti* and *Aedes albopictus* were purchased and larviciding capacity was increased.

Areas of the city with high numbers of *Aedes* mosquitoes and dense human population are potential hotspots for Zika virus transmission. NOMTCB has mosquito surveillance data from multiple years using traps specifically designed to target the collection of *Aedes* mosquitoes. In February, entomologists determined a sampling framework and resumed adult collections, which will likely continue until the winter months. Mosquito activity is temperature-dependent. For example, in 2015, *Aedes* mosquitoes were active through December due to warm winter temperatures. Surveillance will be adapted to include additional areas if any epidemiologic data on suspected or confirmed Zika virus cases become available.

Door-to-door backyard container assessments will continue to identify key premises for control efforts, common containers for mosquito breeding and for developing targeted control efforts. In 2015, property inspections in targeted neighborhoods yielded an average of 1.4 water-holding containers per residence, containers were likely to be small and included buckets, coolers, planters & plant saucers, watering cans, dog bowls, plastic barrels and tubs. In November and December, 31.8% of the yards inspected were positive for immature mosquitoes and *Ae. aegypti* was the most commonly collected species (85.9%). It will become critical to engage residents and neighborhoods in the removal and elimination of containers and other water-holding items in order to achieve long-term management.

The citywide mosquito surveillance program was initiated on February 16, 2016 and the traps targeting *Ae. aegypti* and *Ae. albopictus* March 30, 2016. Adult mosquito surveillance involves the collection, identification and pooling of adult mosquitoes for virus testing.

Public Education/Media

NOHD and NOMTCB are working with key partners to assure the dissemination of updated, accurate and consistent information. Partners include the Mayor's Office of Communications, Neighborhood Engagement, Louisiana Department of Health and Hospitals (DHH), Infectious Disease Epidemiology Section (IDePi), Tulane University School of Public Health & Tropical Medicine Department of Tropical Medicine, the State Arbovirus Working Group, and the Louisiana Mosquito Control Association.

NOHD has established a website with Zika virus information and produced a general fact sheet on Zika and mosquito prevention. NOHD and NOMTCB have also created specialized factsheets to distribute to the following groups:

- General public
- Healthcare Providers, specifically pediatricians and OB/GYNs
- Pregnant Women, specifically those with recent travel history
- Travelers Organizations serving Pregnant Women
- Convention & Visitors Bureau
- Universities, specifically study abroad programs and international students
- Military and National Guard in Louisiana
- Pet owners

NOHD, NOMTCB and DHH are distributing clinical information to healthcare facilities in Orleans Parish. Shared information includes guidance on the process of screening for Zika virus, recognizing signs and symptoms, and knowledge of the areas where the disease is either endemic or outbreaks are currently occurring.

NOMTCB has created a mosquito control factsheet, presented seminars and webinars to the pest control professionals and environmental health specialists locally and nationally. Topics included were general information about mosquito biology and identification, yard inspections, resistance management, best practices for pesticide applications, and mosquito control emergency response preparedness.

Any calls that come to 311 with regards to Zika will be provided with information from the NOHD website and will be transferred to NOHD or NOMTCB for specific questions to be answered. Calls on Zika and mosquito concerns have already been received. The email address healthdepartment@nola.gov has been listed on the website as a method for residents to ask general questions about Zika. Emails will be answered by the Emergency Preparedness Lead or Director of Health and referred to IDePi if needed. Any mosquito related question will be transferred to NOMTCB (658-2440 or mosquitocontrol@nola.gov).

NOMTCB is continuing to accept mosquito service requests from residents through 311. Mosquito Control personnel will update 311 staff and determine if additional information will need to be collected. Location data from each request will be recorded, geo-referenced (mapped), and used to target adulticide and larvicide applications. Standard inspection forms and door hangers will be used to inform residents of actions taken in response.

Interagency Coordination

Federal, State, and City agencies shall continue to be involved in preventing the introduction and spread of Zika virus in New Orleans. The three City working groups will continue to meet as necessary for planning and regular updates will be sent out as needed.

Mitigation and removing mosquito breeding sites are critical to the success of this plan. NOHD and NOMTCB will share all information on calls and service requests through a shared Excel document. Code Enforcement, Sanitation, Safety and Permits, NOHD and NOMTCB will use LAMA to track the number of properties inspected, problem properties and refer properties to each other for follow up. All City agencies shall provide regular updates to NOHD and NOMTCB to ensure that the city is effectively employing a comprehensive prevention and treatment plan.

Phase 2: Travel-Related Cases

This section describes actions that may take place after a travel-related case of Zika virus is reported in Orleans Parish. Cases will be identified by IDEpi who is responsible for testing and counseling the individual and their physician. Individuals with Zika should practice safe sex for 6 months to avoid transmission through sexual contact.

Vector Control

Property inspections and educational campaigns through the use of door hangers, and source reduction will be conducted. Properties within the target area with code violations will be identified and the information will be given to NOFD, Code Enforcement, and the Sanitation Department for processing. Sanitation, NOMTCB and Code Enforcement will work together to identify and remove any debris and trash that may hold water on lots near the target area. Biological control, larviciding and adulticiding will be conducted as weather permits. The details of the case (viremia, time since onset of symptoms) will dictate the intensity of the response. All individuals working on Zika response will be provided with EPA-registered insect repellent.

Public Education/Media

Outreach messaging after a travel-related case of Zika will focus on personal protection against mosquitoes. New Orleanians will be encouraged to wear protective clothing (e.g., long pants and long-sleeve shirts), use effective mosquito repellents, and minimize opportunities for mosquitoes to breed. For example, residents will be encouraged to eliminate water holding containers around the home, change water frequently in containers that cannot be discarded such as pet bowls, ensure windows and doors have screens in good repair, and to consider using air conditioning rather than keeping the doors and windows open.

NOHD will continue to update its website with Zika virus information and distribute updated factsheets to universities, healthcare providers, travelers, hotels, travel agencies, pregnant women, and organizations serving pregnant women.

Updated information and resources will be shared with healthcare providers and NOHD will offer its assistance in preparing providers for Zika, chikungunya, and dengue viruses. NOHD will also

develop protocols for screening and reporting suspected Zika virus cases for its programs and clinics based on CDC guidelines.

The 311 phone line will be available in order to take Zika-related phone calls. These calls will be transferred to the Health Department's call center where trained NOHD staff can answer general questions about Zika virus, to NOMTCB if there are specific vector-related questions and to IDEpi if there are specific human diagnostic, treatment and surveillance questions from health care professionals and patients (1-800-256-2748).

Interagency Coordination

NOMTCB will ask for assistance from other city agencies including NOHD, NOFD, NOPD, Code Enforcement, and the Department of Sanitation. In the past, partner agencies have assisted with waste tire cleanup efforts in areas with increased West Nile virus activity and in areas near chikungunya travel cases. The level of need will depend on the number of travel cases reported, surveillance results, and size of the area needing attention. NOMTCB and NOHD will work with the Office of Communications to conduct media releases and in field interviews if necessary.

Phase 3: Locally Acquired Cases

This section describes actions that may take place after local (mosquito-borne or sexual) transmission of Zika virus is confirmed in Orleans Parish. Actions described in Phase 2 will be continued.

Vector Control

NOMTCB will aggressively implement all mosquito control methods available in the immediate area for a sustained period of time. The area of implementation of aggressive control methods will be determined by the number and location of human cases, mosquito populations, container indices, presence of virus in mosquitoes, and general risk of transmission determined by scientific methods. Aerial and ground treatments will be conducted at three day intervals, as this has previously proven effective in New Orleans. The insecticide label lifts any restrictions on repeated applications in the event of disease detection. Applications should be timed just after sunrise or just before sunset, sunset preferred. This is preferred because of the highly urban larval habitats of the vector mosquitoes and the need to quickly suppress gravid adult females.

Property inspections, educational campaigns through the use of door hangers, and source reduction will be conducted. Biological control, larviciding and adulticiding will be conducted as weather permits. A sustained effort will be activated for a period of time, approximately 1 month, due to the time frame for potential transmission (length of viremic period of human case, extrinsic incubation period in mosquito and potential lifespan of infected mosquito).

Public Education/Media

If local transmission is confirmed in Orleans Parish, outreach messages will include mosquito control and prevention, personal protection, and information on the disease. NOHD will distribute updated factsheets to universities, healthcare providers, travelers, hotels, travel

agencies, pregnant women, and organizations serving pregnant women. NOHD will also distribute specialized factsheets to:

- Schools and Childcare Facilities
- Neighborhood Associations/Community Organizations
- Homeless Providers
- Those participating in outdoor activities (NORDC, school sports, etc.)
- Those who work outside (construction, landscaping, parks, etc.)

Zika Outreach Teams will be deployed to neighborhoods with local transmission of Zika. Each of these teams will provide each property with a door hanger, and in the event they are approached with questions, they will have a basic knowledge of what needs to be said as well as a number to provide for inquiries. Their message will be three-fold: protection, information on Zika virus disease and source reduction. Protection methods will include both mosquito transmission and sexual transmission. Source reduction will be emphasized so that there is a reduction of habitat for mosquitoes. The team will also conduct property inspections and will remove standing water and report all breeding locations to NOMTCB. Properties within the target area with code violations will be identified and the information will be given to NOFD, Code Enforcement, and the Sanitation Department for processing.

Sexual transmission will become a serious risk if there is local transmission. All individuals will be encouraged to use condoms or abstain from sexual activity. Women will also be encouraged to use contraception to avoid unwanted pregnancies.

NOHD, DHH and NOMTCB will reach out to community partners that can spread information about Zika virus and mosquito source reduction throughout their organizations. Organizations serving populations vulnerable to mosquito-borne diseases will be targeted first and will be expanded to the entire city over time.

NOHD will activate a Zika virus hotline and call center to answer questions, address fears and rumors, and provide resources. Specific mosquito and treatment questions will be referred to NOMTCB. Community partners, health care providers, and other organizations will be kept up-to-date on information via an email listserv maintained by NOHD. NOHD also maintains a NOLA Ready Emergency Alert group that can be utilized to quickly send alerts to these organizations.

Interagency Coordination

Interagency coordination will continue as before.

Zika virus fact sheets (no mosquito-borne, locally transmitted cases)

Everything you need to know about Zika Virus



On January 15, 2016, the Centers for Disease Control and Prevention (CDC) issued a travel alert for people traveling to regions where Zika virus transmission is ongoing. Pregnant women in any trimester should consider postponing travel to the areas where Zika virus transmission is ongoing.

Currently the City of New Orleans Mosquito and Termite Control Board (NOMTCB) and the New Orleans Health Department (NOHD) are working with partners to provide you with information about Zika. NOTCMB is monitoring the mosquito population. Mitigation efforts to limit the mosquito population will utilize a combination of chemical control and habitat reduction methods as needed.

What is Zika?



Zika virus disease (Zika) is a disease spread to people primarily through the bite of an infected mosquito. It can also spread when an infected man has sex with his partner. Most people with Zika do not know they have it. Symptoms are usually mild, lasting about a week.

Common Symptoms: Fever, rash, joint pain, and conjunctivitis (red eyes). Other symptoms include headache and muscle pain.

If you develop symptoms within 2 weeks of travel, see a doctor and tell the doctor where you traveled.

Pregnancy and Zika Virus



Zika can be spread from a mother to her fetus during pregnancy. There have been reports to a serious birth defect of the brain called microcephaly in babies of mothers who had Zika virus while pregnant.

Travel Information for women who are pregnant or thinking of becoming pregnant:



Consider postponing travel to any area where Zika virus transmission is ongoing.



If you must travel to one of these areas, talk to your doctor first and strictly follow steps to prevent mosquito bites during your trip.



It is safe for pregnant and breastfeeding women to use insect repellent.

Microcephaly is a birth defect where a baby's head is smaller than expected when compared to babies that are the same sex and age. Babies with microcephaly often have smaller brains that may not have developed properly.

Travel Advisory

Level 2:

Practice Enhanced Precautions

For a list of affected countries:

Visit cdc.gov/travel

How to protect yourself



Cover your skin by wearing long-sleeve shirts and long pants. For extra protection, treat clothing with the permethrin insect repellent.



Remove standing water around the home in places such as plant containers, tires, pet dishes and buckets.



Daytime is when mosquitoes that spread Zika virus are aggressive daytime biters, but they can also bite at dawn and dusk.



EPA-registered insect repellents

when used as directed, are proven safe and effective even for pregnant or breastfeeding women.

- Look for these ingredients: DEET, picaridin, IR3535, OLE, or PMD.
- Reapply insect repellent as directed.
- Apply sunscreen before insect repellent.
- Do not apply repellent directly to a child's face. Spray it into your hand first, then apply.

Treatment

There is no vaccine to prevent Zika virus infection, nor any medicine to treat it.

If you are ill, protect yourself from mosquito bites. If a mosquito bites you, it can spread the virus and infect others.



@NOLAhealthdept



@NOLAhealthdept



www.nola.gov/health



Dial 311

Icons retrieved from noun project.

Everything you need to know about Zika Virus Information for Pets



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What is Zika?



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Common Symptoms: Fever, rash, joint pain, and conjunctivitis (red eyes). Other symptoms include headache and muscle pain.




If you develop symptoms within 2 weeks of travel, see a doctor and tell the doctor where you traveled.

Pregnancy and Zika Virus



Zika can be spread from a mother to her fetus during pregnancy. There have been reports to a serious birth defect of the brain called microcephaly in babies of mothers who had Zika virus while pregnant.

Travel Information for women who are pregnant or thinking of becoming pregnant:

-  Consider postponing travel to any area where Zika virus transmission is ongoing.
-  If you must travel to one of these areas, talk to your doctor first and strictly follow steps to prevent mosquito bites during your trip.
-  It is safe for pregnant and breastfeeding women to use insect repellent.

Microcephaly is a birth defect where a baby's head is smaller than expected when compared to babies that are the same sex and age. Babies with microcephaly often have smaller brains that may not have developed properly.

Travel Advisory

Level 2:

Practice Enhanced Precautions

For a list of affected countries:
Visit cdc.gov/travel

Pets

There is no evidence that Zika virus is spread to people from contact with animals. Animals in the United States are not at risk of becoming sick with Zika virus.

How to protect yourself



Cover your skin by wearing long-sleeve shirts and long pants. For extra protection, treat clothing with the permethrin insect repellent.



Remove standing water around the home in places such as plant containers, tires, pet dishes and buckets.



Daytime is when mosquitoes that spread Zika virus are most aggressive, but they can also bite at dawn and dusk.



EPA-registered insect repellents when used as directed, are proven safe and effective even for pregnant or breastfeeding women.

- Look for these ingredients: DEET, picaridin, IR3535, OLE, or PMD.
- Reapply insect repellent as directed.
- Apply sunscreen before insect repellent.
- Do not apply repellent directly to a child's face. Spray it into your hand first, then apply.

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Everything you need to know about

Zika Virus

Information for Pregnant Women



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Currently the City of New Orleans Mosquito and Termite Control Board (NOMTCB) and the New Orleans Health Department (NOHD) are working with partners to provide you with information about Zika. NOTCMB is monitoring the mosquito population. Mitigation efforts to limit the mosquito population will utilize a combination of chemical control and habitat reduction methods as needed.

What is Zika?



Zika virus disease (Zika) is a disease spread to people primarily through the bite of an infected mosquito. It can also spread when an infected man has sex with his partner. Most people with Zika do not know they have it. Symptoms are usually mild, lasting about a week.

Common Symptoms: Fever, rash, joint pain, and conjunctivitis (red eyes). Other symptoms include headache and muscle pain.

If you develop symptoms within 2 weeks of travel, see a doctor and tell the doctor where you traveled.

Pregnancy and Zika Virus



Zika can be spread from a mother to her fetus during pregnancy. There have been reports to a serious birth defect of the brain called microcephaly in babies of mothers who had Zika virus while pregnant.

Travel Information for women who are pregnant or thinking of becoming pregnant:

- Consider postponing travel to any area where Zika virus transmission is ongoing.
- If you must travel to one of these areas, talk to your doctor first and strictly follow steps to prevent mosquito bites during your trip.
- It is safe for pregnant and breastfeeding women to use insect repellent.

Microcephaly is a birth defect where a baby's head is smaller than expected when compared to babies that are the same sex and age. Babies with microcephaly often have smaller brains that may not have developed properly.

Travel Advisory

Level 2:

Practice Enhanced Precautions

For a list of affected countries:

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How to protect yourself



Cover your skin by wearing long-sleeve shirts and long pants. For extra protection, treat clothing with the permethrin insect repellent.



Remove standing water around the home in places such as plant containers, tires, pet dishes and buckets.



Daytime is when mosquitoes that spread Zika virus are most aggressive, but they can also bite at dawn and dusk.



EPA-registered insect repellents when used as directed, are proven safe and effective even for pregnant or breastfeeding women.

- Look for these ingredients: DEET, picaridin, IR3535, OLE, or PMD.
- Reapply insect repellent as directed.
- Apply sunscreen before insect repellent.
- Do not apply repellent directly to a child's face. Spray it into your hand first, then apply.

Do not have unprotected sex with a male partner who has recently traveled to or lived in a country with Zika.

If you have sex (vaginal, anal, or oral) you should use a condom the right way every time.



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Everything you need to know about

Zika Virus

Information for Travelers



On January 15, 2016, the Centers for Disease Control and Prevention (CDC) issued a travel alert for people traveling to regions where Zika virus transmission is ongoing. Pregnant women in any trimester should consider postponing travel to the areas where Zika virus transmission is ongoing.

Currently the City of New Orleans Mosquito and Termite Control Board (NOMTCB) and the New Orleans Health Department (NOHD) are working with partners to provide you with information about Zika. NOTCMB is monitoring the mosquito population. Mitigation efforts to limit the mosquito population will utilize a combination of chemical control and habitat reduction methods as needed.

What is Zika?



Zika virus disease (Zika) is a disease spread to people primarily through the bite of an infected mosquito. It can also spread when an infected man has sex with his partner. Most people with Zika do not know they have it. Symptoms are usually mild, lasting about a week.

Common Symptoms: Fever, rash, joint pain, and conjunctivitis (red eyes). Other symptoms include headache and muscle pain.

If you develop symptoms within 2 weeks of travel, see a doctor and tell the doctor where you traveled.

Planning a trip



If you are planning a trip to an area with ongoing Zika virus transmission, you should protect yourself and your family from mosquito bites. There is no vaccine to prevent you from becoming infected.

If you are pregnant, you should consider postponing travel to the areas with ongoing transmission.

If you are thinking of becoming pregnant, talk to your doctor about travel plans.

Returning travelers



If you have recently returned from an area with ongoing virus transmission:

Men: Use condoms with sexual partners or abstain from sexual activity.

Pregnant women: Visit your doctor for follow up. Testing is recommended for women with symptoms within the first week of illness. Even if you do not have symptoms, you can be screened for Zika virus infection.

Travel Advisory

Level 2:

Practice Enhanced Precautions

For a list of affected countries:

Visit cdc.gov/travel

How to protect yourself



Cover your skin by wearing long-sleeve shirts and long pants. For extra protection, treat clothing with the permethrin insect repellent.



Remove standing water around the home in places such as plant containers, tires, pet dishes and buckets.



Daytime is when mosquitoes that spread Zika virus are most aggressive, but they can also bite at dawn and dusk.



EPA-registered insect repellents when used as directed, are proven safe and effective even for pregnant or breastfeeding women.

- Look for these ingredients: DEET, picaridin, IR3535, OLE, or PMD.
- Reapply insect repellent as directed.
- Apply sunscreen before insect repellent.
- Do not apply repellent directly to a child's face. Spray it into your hand first, then apply.

Stay in places with air conditioning or that use window and door screens to keep mosquitoes outside.

Sleep under a mosquito bed net if you are overseas or outside and are not able to protect yourself from mosquito bites.



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Everything you need to know about

Zika Virus

Information for Universities



On January 15, 2016, the Centers for Disease Control and Prevention (CDC) issued a travel alert for people traveling to regions where Zika virus transmission is ongoing. Pregnant women in any trimester should consider postponing travel to the areas where Zika virus transmission is ongoing.

Currently the City of New Orleans Mosquito and Termite Control Board (NOMTCB) and the New Orleans Health Department (NOHD) are working with partners to provide you with information about Zika. NOTCMB is monitoring the mosquito population. Mitigation efforts to limit the mosquito population will utilize a combination of chemical control and habitat reduction methods as needed.

What is Zika?



Zika virus disease (Zika) is a disease spread to people primarily through the bite of an infected mosquito. It can also spread when an infected man has sex with his partner. Most people with Zika do not know they have it. Symptoms are usually mild, lasting about a week.

Common Symptoms: Fever, rash, joint pain, and conjunctivitis (red eyes). Other symptoms include headache and muscle pain.

If you develop symptoms within 2 weeks of travel, see a doctor and tell the doctor where you traveled.

Tips for traveling students



Students planning a trip to an area with ongoing Zika virus transmission should protect themselves and family from mosquito bites. There is no vaccine to prevent Zika. If a student is pregnant, she should consider postponing travel to the areas with ongoing transmission.

Students who are thinking of becoming pregnant should talk to her doctor about travel plans.

Returning travelers



If a student has recently returned from an area with ongoing virus transmission, he or she should:

Men: Use condoms with sexual partners or abstain from sexual activity.

Pregnant women: Visit your doctor for follow up. Testing is recommended for women with symptoms within the first week of illness. Even if you do not have symptoms, you can be screened for Zika virus infection.

Travel Advisory

Level 2:

Practice Enhanced Precautions

For a list of affected countries:
Visit cdc.gov/travel

How to protect yourself



Cover your skin by wearing long-sleeve shirts and long pants. For extra protection, treat clothing with the permethrin insect repellent.



Remove standing water around the home in places such as plant containers, tires, pet dishes and buckets.



Daytime is when mosquitoes that spread Zika virus are most aggressive, but they can also bite at dawn and dusk.



EPA-registered insect repellents

when used as directed, are proven safe and effective even for pregnant or breastfeeding women.

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- Reapply insect repellent as directed.
- Apply sunscreen before insect repellent.
- Do not apply repellent directly to a child's face. Spray it into your hand first, then apply.

Stay in places with air conditioning or that use window and door screens to keep mosquitoes outside.

Sleep under a mosquito bed net if you are overseas or outside and are not able to protect yourself from mosquito bites.



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Everything you need to know about Zika Virus

Information for Missionaries



On January 15, 2016, the Centers for Disease Control and Prevention (CDC) issued a travel alert for people traveling to regions where Zika virus transmission is ongoing. Pregnant women in any trimester should consider postponing travel to the areas where Zika virus transmission is ongoing.

Currently the City of New Orleans Mosquito and Termite Control Board (NOMTCB) and the New Orleans Health Department (NOHD) are working with partners to provide you with information about Zika. NOTCMB is monitoring the mosquito population. Mitigation efforts to limit the mosquito population will utilize a combination of chemical control and habitat reduction methods as needed.

What is Zika



Zika virus disease (Zika) is a disease spread to people primarily through the bite of an infected mosquito. It can also spread when an infected man has sex with his partner. Most people with Zika do not know they have it. Symptoms are usually mild, lasting about a week.

Common Symptoms: Fever, rash, joint pain, and conjunctivitis (red eyes). Other symptoms include headache and muscle pain.

If you develop symptoms within 2 weeks of travel, see a doctor and tell the doctor where you traveled.

Planning a trip



If you are planning a trip to an area with ongoing Zika virus transmission, you should protect yourself and your family from mosquito bites. There is no vaccine to prevent you from becoming infected.

If you are pregnant, you should consider postponing travel to the areas with ongoing transmission.

If you are thinking of becoming pregnant, talk to your doctor about travel plans.

Returning travelers



If you have recently returned from an area with ongoing virus transmission:

Men: Use condoms with sexual partners or abstain from sexual activity.

Pregnant women: Visit your doctor for follow up. Testing is recommended for women with symptoms within the first week of illness. Even if you do not have symptoms, you can be screened for Zika virus infection.

Travel Advisory

Level 2:

Practice Enhanced Precautions

For a list of affected countries:

Visit cdc.gov/travel

How to protect yourself



Cover your skin by wearing long-sleeve shirts and long pants. For extra protection, treat clothing with the permethrin insect repellent.



Remove standing water around the home in places such as plant containers, tires, pet dishes and buckets.



Daytime is when mosquitoes that spread Zika virus are aggressive daytime biters, but they can also bite at dawn and dusk.



EPA-registered insect repellents

when used as directed, are proven safe and effective even for pregnant or breastfeeding women.

- Look for these ingredients: DEET, picaridin, IR3535, OLE, or PMD.
- Reapply insect repellent as directed.
- Apply sunscreen before insect repellent.
- Do not apply repellent directly to a child's face. Spray it into your hand first, then apply.

Stay in places with air conditioning or that use window and door screens to keep mosquitoes outside.

Sleep under a mosquito bed net if you are overseas or outside and are not able to protect yourself from mosquito bites.



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Everything you need to know about Zika Virus

Information for Military



On January 15, 2016, the Centers for Disease Control and Prevention (CDC) issued a travel alert for people traveling to regions where Zika virus transmission is ongoing. Pregnant women in any trimester should consider postponing travel to the areas where Zika virus transmission is ongoing.

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Zika virus disease (Zika) is a disease spread to people primarily through the bite of an infected mosquito. It can also spread when an infected man has sex with his partner. Most people with Zika do not know they have it. Symptoms are usually mild, lasting about a week.

Common Symptoms: Fever, rash, joint pain, and conjunctivitis (red eyes). Other symptoms include headache and muscle pain.

If you develop symptoms within 2 weeks of travel, see a doctor and tell the doctor where you traveled.

Planning a trip



If you are planning a trip to an area with ongoing Zika virus transmission, you should protect yourself and your family from mosquito bites. There is no vaccine to prevent you from becoming infected.

If you are pregnant, you should consider postponing travel to the areas with ongoing transmission.

If you are thinking of becoming pregnant, talk to your doctor about travel plans.

Returning travelers



If you have recently returned from an area with ongoing virus transmission:

Men: Use condoms with sexual partners or abstain from sexual activity.

Pregnant women: Visit your doctor for follow up. Testing is recommended for women with symptoms within the first week of illness. Even if you do not have symptoms, you can be screened for Zika virus infection.

Travel Advisory

Level 2:

Practice Enhanced Precautions

For a list of affected countries:

Visit cdc.gov/travel

How to protect yourself



Cover your skin by wearing long-sleeve shirts and long pants. For extra protection, treat clothing with the permethrin insect repellent.



Remove standing water around the home in places such as plant containers, tires, pet dishes and buckets.



Daytime is when mosquitoes that spread Zika virus are aggressive daytime biters, but they can also bite at dawn and dusk.



EPA-registered insect repellents

when used as directed, are proven safe and effective even for pregnant or breastfeeding women.

- Look for these ingredients: DEET, picaridin, IR3535, OLE, or PMD.
- Reapply insect repellent as directed.
- Apply sunscreen before insect repellent.
- Do not apply repellent directly to a child's face. Spray it into your hand first, then apply.

Stay in places with air conditioning or that use window and door screens to keep mosquitoes outside.

Sleep under a mosquito bed net if you are overseas or outside and are not able to protect yourself from mosquito bites.



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Everything you need to know about Zika Virus Information for Businesses



On January 15, 2016, the Centers for Disease Control and Prevention (CDC) issued a travel alert for people traveling to regions where Zika virus transmission is ongoing. Pregnant women in any trimester should consider postponing travel to the areas where Zika virus transmission is ongoing.

Currently the City of New Orleans Mosquito and Termite Control Board (NOMTCB) and the New Orleans Health Department (NOHD) are working with partners to provide you with information about Zika. NOTCMB is monitoring the mosquito population. Mitigation efforts to limit the mosquito population will utilize a combination of chemical control and habitat reduction methods as needed.

What is Zika?



Zika virus disease (Zika) is a disease spread to people primarily through the bite of an infected mosquito. It can also spread when an infected man has sex with his partner. Most people with Zika do not know they have it. Symptoms are usually mild, lasting about a week.

Common Symptoms: Fever, rash, joint pain, and conjunctivitis (red eyes). Other symptoms include headache and muscle pain.

If you develop symptoms within 2 weeks of travel, see a doctor. and tell the doctor where you traveled.

Planning a trip



If you are planning a trip to an area with ongoing Zika virus transmission, you should protect yourself and your family from mosquito bites. There is no vaccine to prevent you from becoming infected.

If you are pregnant, you should consider postponing travel to the areas with ongoing transmission.

If you are thinking of becoming pregnant, talk to your doctor about travel plans.

Returning workers



If you have recently returned from an area with ongoing virus transmission:

Men: Use condoms with sexual partners or abstain from sexual activity.

Pregnant women: Visit your doctor for follow up. Testing is recommended for women with symptoms within the first week of illness. Even if you do not have symptoms, you can be screened for Zika virus infection.

Travel Advisory

Level 2:

Practice Enhanced Precautions

For a list of affected countries:

Visit cdc.gov/travel

How to protect yourself



Cover your skin by wearing long-sleeve shirts and long pants. For extra protection, treat clothing with the permethrin insect repellent.



Remove standing water around the building in places such as plant containers, outdoor toys, playsets, pools or trash containers.



Daytime Mosquitoes that spread Zika virus are aggressive daytime biters, but they can also bite at dawn and dusk.



EPA-registered insect repellents when used as directed, are proven safe and effective even for pregnant or breastfeeding women.

- Look for these ingredients: DEET, picaridin, IR3535, OLE, or PMD.
- Reapply insect repellent as directed.
- Apply sunscreen before insect repellent.

Stay in places with air conditioning or that use window and door screens to keep mosquitoes outside.

Sleep under a mosquito bed net if you are overseas or outside and are not able to protect yourself from mosquito bites.



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Everything you need to know about Zika Virus For Healthcare Providers



On January 15, 2016, the Centers for Disease Control and Prevention (CDC) issued a travel alert for people traveling to regions where Zika virus transmission is ongoing. Pregnant women in any trimester should consider postponing travel to the areas where Zika virus transmission is ongoing.

Currently the City of New Orleans Mosquito and Termite Control Board (NOMTCB) and the New Orleans Health Department (NOHD) are working with partners to provide you with information about Zika. NOTCMB is monitoring the mosquito population. Mitigation efforts to limit the mosquito population will utilize a combination of chemical control and habitat reduction methods as needed.

What is Zika?



Zika virus disease (Zika) is a disease spread to people primarily through the bite of an infected mosquito. It can also spread when an infected man has sex with his partner. Most people with Zika do not know they have it. Symptoms are usually mild, lasting about a week.

Common Symptoms: Fever, rash, joint pain, and conjunctivitis (red eyes). Other symptoms include headache and muscle pain.

If you see patients with the symptoms ask them where they have traveled.

Diagnostic testing

Preliminary diagnosis is based on the patient's clinical features, places and dates of travel and activities. Acute Zika virus disease should be suspected if the patient:

- 1) Traveled to or resided in an area with ongoing transmission of Zika virus within the past 2 weeks
- 2) Displays more than two symptoms

There are no commercially available diagnostic tests for Zika disease. Zika virus testing is performed by the CDC.

As an arboviral disease, Zika virus is a nationally notifiable condition. Healthcare providers are encouraged to report suspected cases to DHH to facilitate diagnosis and mitigate the risk of local transmission.

Treatment involves supportive care; Aspirin and other non-steroidal anti-inflammatory drugs (NSAIDs) should be avoided until dengue can be ruled out to reduce risk of hemorrhage.

Report any suspected cases to DHH for testing.

Report Suspected Cases

Report to Louisiana Department of Health and Hospitals Infectious Disease Epidemiology Section at:
Main line: (504)568-8313
After Hours: (800)256-2748

How to protect yourself



Cover your skin by wearing long-sleeve shirts and long pants. For extra protection, treat clothing with the permethrin insect repellent.



Remove standing water around the home in places such as plant containers, tires, pet dishes and buckets.



Daytime is when mosquitoes that spread Zika virus are aggressive daytime biters, but they can also bite at dawn and dusk.



EPA-registered insect repellents when used as directed, are proven safe and effective even for pregnant or breastfeeding women.

- Look for these ingredients: DEET, picaridin, IR3535, OLE, or PMD.
- Reapply insect repellent as directed.
- Apply sunscreen before insect repellent.
- Do not apply repellent directly to a child's face. Spray it into your hand first, then apply.

Travel information

Pregnant women should consider postponing travel to any area where Zika virus transmission is ongoing.

If a patient must travel to one of these areas, they should strictly follow steps to prevent mosquito bites. It is safe for pregnant women to use insect repellent.



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Everything you need to know about Zika Virus Information for OB/GYN



On January 15, 2016, the Centers for Disease Control and Prevention (CDC) issued a travel alert for people traveling to regions where Zika virus transmission is ongoing. Pregnant women in any trimester should consider postponing travel to the areas where Zika virus transmission is ongoing.

Currently the City of New Orleans Mosquito and Termite Control Board (NOMTCB) and the New Orleans Health Department (NOHD) are working with partners to provide you with information about Zika. NOTCMB is monitoring the mosquito population. Mitigation efforts to limit the mosquito population will utilize a combination of chemical control and habitat reduction methods as needed.

What is Zika?



Zika virus disease (Zika) is a disease spread to people primarily through the bite of an infected mosquito. It can also spread when an infected man has sex with his partner. Most people with Zika do not know they have it. Symptoms are usually mild, lasting about a week.

Common Symptoms: Fever, rash, joint pain, and conjunctivitis (red eyes). Other symptoms include headache and muscle pain.

There have been serious reports of a birth defect of the brain called microcephaly and other poor pregnancy outcomes of mothers who were infected with Zika virus while pregnant.

Evaluating and testing patients



Women who have traveled to an area with ongoing Zika virus transmission during pregnancy and reported two or more symptoms within two weeks of travel should be evaluated for Zika virus infection and tested in accordance with CDC Interim Guidance.

Zika virus infections have been confirmed in infants with microcephaly, but this association is under investigation.

Women with recent travel to an area with ongoing Zika virus transmission and ultrasound findings of microcephaly or intracranial calcifications may be offered amniocentesis.

A positive Zika virus result from amniotic fluid would be suggestive of intrauterine infection. In the absence of microcephaly, the presence of intracranial calcifications before 22 weeks gestation may suggest a risk for the future development of microcephaly.

The CDC recommends testing tissues of live births and fetal loss with evidence of maternal or fetal Zika virus infection.

Report any suspected cases to DHH for testing.

Report Suspected Cases

Report to Louisiana Department of Health and Hospitals Infectious Disease Epidemiology Section at:
Main line: (504)568-8313
After Hours: (800)256-2748

How to protect yourself



Cover your skin by wearing long-sleeve shirts and long pants. For extra protection, treat clothing with the permethrin insect repellent.



Remove standing water around the home in places such as plant containers, tires, pet dishes and buckets.



Daytime is when mosquitoes that spread Zika virus are most aggressive, but they can also bite at dawn and dusk.



EPA-registered insect repellents

when used as directed, are proven safe and effective even for pregnant or breastfeeding women.

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- Reapply insect repellent as directed.
- Apply sunscreen before insect repellent.
- Do not apply repellent directly to a child's face. Spray it into your hand first, then apply.

Travel information



Pregnant women should consider postponing travel to any area where Zika virus transmission is ongoing.

If a patient must travel to one of these areas, they should strictly follow steps to prevent mosquito bites. It is safe for pregnant women to use insect repellent.



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Everything you need to know about Zika Virus For Pediatricians



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Currently the City of New Orleans Mosquito and Termite Control Board (NOMTCB) and the New Orleans Health Department (NOHD) are working with partners to provide you with information about Zika. NOTCMB is monitoring the mosquito population. Mitigation efforts to limit the mosquito population will utilize a combination of chemical control and habitat reduction methods as needed.

What is Zika?



Zika virus disease (Zika) is a disease spread to people primarily through the bite of an infected mosquito. It can also spread when an infected man has sex with his partner. Most people with Zika do not know they have it. Symptoms are usually mild, lasting about a week.

Common Symptoms: Fever, rash, joint pain, and conjunctivitis (red eyes). Other symptoms include headache and muscle pain.

There have been serious reports of a serious birth defect of the brain called microcephaly and other poor pregnancy outcomes of mothers who were infected with Zika virus while pregnant.

Children and infants

Acute Zika virus disease should be suspected in an infant or child under 18 years who:

- 1) Traveled to or resided in an area with ongoing transmission of Zika virus within the past 2 weeks
- 2) Displays more than two symptoms

Zika virus testing is recommended within 48 hours of birth for infants with microcephaly or intracranial calcifications and whose mothers have a history of travel to or who reside in areas with ongoing transmission of Zika virus.

Microcephaly is a birth defect where a baby's head is smaller than expected when compared to babies of the same sex and age. Babies with microcephaly often have smaller brains that may not have developed properly.

Treatment involves supportive care; aspirin and other NSAIDs should be avoided until dengue can be ruled out to reduce risk of hemorrhage.

Report any suspected cases to DHH for testing.

Report Suspected Cases

Report to Louisiana Department of Health and Hospitals Infectious Disease Epidemiology at:
Main Line: 504-568-8313
After Hours: 800-256-2748

Tips for patients



Cover your skin by wearing long-sleeve shirts and long pants. For extra protection, treat clothing with the permethrin insect repellent.



Remove standing water around the home in places such as plant containers, tires, pet dishes and buckets.



Daytime is when mosquitoes that spread Zika virus are most aggressive, but they can also bite at dawn and dusk.



EPA-registered insect repellents when used as directed, are proven safe and effective even for pregnant or breastfeeding women.

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- Reapply insect repellent as directed.
- Apply sunscreen before insect repellent.
- Do not apply repellent directly to a child's face. Spray it into your hand first, then apply.

Travel information



Pregnant women should consider postponing travel to any area where Zika virus transmission is ongoing.

If a patient must travel to one of these areas, they should strictly follow steps to prevent mosquito bites. It is safe for pregnant women to use insect repellent.



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Mosquito Biology Fact Sheet

City of New Orleans Mosquito, Termite & Rodent Control Board

Mosquitoes: A General Guide

Brendan Carter, Greg Thompson, and Sarah Michaels
City of New Orleans Mosquito, Termite & Rodent Control Board

Mosquitoes can act as annoying biting nuisances and are a public health concern for many in Louisiana and across the world. It is important for residents to understand the mosquito life cycle, the health concerns associated with mosquitoes, and the best methods of controlling and preventing mosquitoes.

Mosquito Identification

Mosquitoes belong to the scientific order Diptera which includes house flies, midges, and gnats. The most distinguishing feature of the order is a single set of functional wings, unlike butterflies and dragonflies. The majority of mosquitoes can be distinguished from other Diptera by their long, needle-shaped proboscis which is used to take blood meals from their hosts (Figure 1). **Only female mosquitoes take a blood meal.**

Overall, there are about 3,500 identified mosquito species in the world. The continental United States is home to about 170 species with at least 64 species in Louisiana. Each mosquito species prefers a particular host for their blood meal which can include birds, humans, or other mammals. Different mosquito species are active at different times of day and prefer to lay eggs in specific types of habitat, depending on the species.

The main species of concern in Orleans Parish are *Culex quinquefasciatus* (southern house mosquito), *Aedes albopictus* (Asian tiger mosquito; Figure 1), and *Aedes aegypti* (yellow fever mosquito; Figure 2).



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Figure 1. An adult female *Aedes albopictus*. The white line on the thorax is characteristic of the species.



Figure 2. An adult female *Aedes aegypti* taking a blood meal. The curved lyre-shape on the thorax is characteristic of the species.

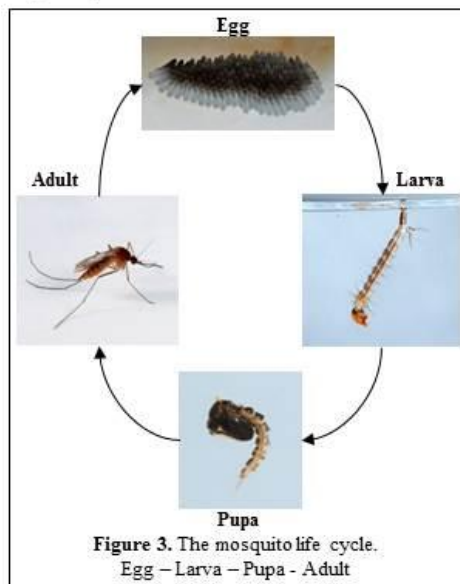


Figure 3. The mosquito life cycle.
Egg - Larva - Pupa - Adult

Mosquito Life Cycle

The first stage of the mosquito life cycle is the egg (Figure 3), which can be laid on a variety of substrates. Some species prefer to lay their eggs in containers while others prefer standing water or wet ground. Some species like *Cx. quinquefasciatus* lay their eggs in rafts in standing water, while others like *Ae. aegypti* and *Ae. albopictus* lay their eggs singly in containers. After being exposed to water, larvae hatch from eggs.

All mosquito larvae must develop in water where they feed and grow through four different larval stages called instars. Mosquito larvae can often be found on top of the water surface where they use their siphon to breathe. Larvae usually prefer shaded, still water. After the 4th instar, mosquito larvae develop into pupae. Pupae are also aquatic, but do not feed.

When ready, the adult mosquito emerges from the pupa. **It takes a mosquito only 5-7 days to grow from egg to adult.** Once the adult female mosquito has mated and taken a blood meal, the mosquito will be ready to lay eggs and continue the cycle.

All photos by E. D. Freytag

Doc. NOMTCB 1-2016

Mosquitoes & Public Health

A biting mosquito can also be a public health threat. The bite of a mosquito can potentially transmit various disease pathogens including West Nile virus (WNV), Eastern Equine Encephalitis (EEE), St. Louis Encephalitis (SLE), La Crosse encephalitis (LAC), chikungunya, dengue, Zika, and dog heartworm among others. Different species can transmit different disease pathogens as summarized below.

Mosquito Species	Common Name	Preferred Larval Habitat	Active Time	Associated Disease Pathogens
<i>Aedes aegypti</i>	Yellow Fever mosquito	Containers, tires	Daytime, dusk, dawn	chikungunya, dengue, Zika
<i>Aedes albopictus</i>	Asian Tiger mosquito	Containers, tires	Daytime, dusk, dawn	chikungunya, dengue, Zika, EEE, LAC, dog heartworm
<i>Culex quinquefasciatus</i>	Southern House mosquito	Standing water with organic matter, tires	Evening, dusk to dawn	WNV, SLE, dog heartworm

Mosquito Prevention & Control

There are many ways to protect yourself against mosquitoes and to prevent mosquitoes from breeding around the outside of your home. To prevent mosquitoes and mosquito bites:

- Empty and scrub, turn over, or cover containers that may hold water
- Tightly cover any water storage containers (buckets, rain barrels, etc.)
- Dispose of or recycle used tires and other trash that can hold water
- Cover containers that cannot be emptied with a fine wire mesh with holes smaller than an adult mosquito
- Use screens on windows and doors and keep them in good repair
- Clean clogged roof gutters
- Wear mosquito repellent
- Wear long pants and long-sleeve shirts
- Limit outdoor activity at dusk or dawn

Mosquito repellents recommended by the World Health Organization (WHO) include DEET, picaridin, oil of lemon eucalyptus, and IR3535. Wearing repellents may help reduce the number of mosquito bites, but dumping over containers and removing standing water will reduce mosquito breeding in your yard or neighborhood. Be sure to check any bottles, buckets, fountains, potted plants, pet dishes, rain barrels, tarps, or any other items that may hold water (Figure 4). **Mosquitoes only need a small amount of water to lay eggs.**



Figure 4. Potential mosquito breeding sites

For more information or to report mosquito problems, please contact:

City of New Orleans Mosquito, Termite & Rodent Control Board

Phone: 311 or (504) 658-2400

Email: mosquitocontrol@nola.gov

Claudia Riegel, Ph.D.

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New Orleans Mosquito, Termite &
Rodent Control Board

criegel@nola.gov

Sarah Michaels, MSPH

Entomologist

New Orleans Mosquito, Termite &
Rodent Control Board

srmichaels@nola.gov

Zika Fact Sheets (Travel Cases)

Everything you need to know about Zika Virus



On January 15, 2016, the Centers for Disease Control and Prevention (CDC) issued a travel alert for people traveling to regions where Zika virus transmission is ongoing. Pregnant women in any trimester should consider postponing travel to the areas where Zika virus transmission is ongoing. **There are travel-related cases in New Orleans but no locally transmitted cases.**

Currently the City of New Orleans Mosquito and Termite Control Board (NOMTCB) and the New Orleans Health Department (NOHD) are working with partners to provide you with information about Zika. NOTCMB is monitoring the mosquito population. Mitigation efforts to limit the mosquito population will utilize a combination of chemical control and habitat reduction methods as needed.

What is Zika?



Zika virus disease (Zika) is a disease spread to people primarily through the bite of an infected mosquito. It can also spread when an infected man has sex with his partner. Most people with Zika do not know they have it. Symptoms are usually mild, lasting about a week.

Common Symptoms: Fever, rash, joint pain, and conjunctivitis (red eyes). Other symptoms include headache and muscle pain.

If you develop symptoms within 2 weeks of travel, see a doctor and tell the doctor where you traveled.

Pregnancy and Zika Virus



Zika can be spread from a mother to her fetus during pregnancy. There have been reports to a serious birth defect of the brain called microcephaly in babies of mothers who had Zika virus while pregnant.

Travel Information for women who are pregnant or thinking of becoming pregnant:



Consider postponing travel to any area where Zika virus transmission is ongoing.



If you must travel to one of these areas, talk to your doctor first and strictly follow steps to prevent mosquito bites during your trip.



It is safe for pregnant and breastfeeding women to use insect repellent.

Microcephaly is a birth defect where a baby's head is smaller than expected when compared to babies that are the same sex and age. Babies with microcephaly often have smaller brains that may not have developed properly.

Travel Advisory

Level 2:

Practice Enhanced Precautions

For a list of affected countries:

Visit cdc.gov/travel

How to protect yourself



Cover your skin by wearing long-sleeve shirts and long pants. For extra protection, treat clothing with the permethrin insect repellent.



Remove standing water around the home in places such as plant containers, tires, pet dishes and buckets.



Daytime is when mosquitoes that spread Zika virus are aggressive daytime biters, but they can also bite at dawn and dusk.



EPA-registered insect repellents

when used as directed, are proven safe and effective even for pregnant or breastfeeding women.

- Look for these ingredients: DEET, picaridin, IR3535, OLE, or PMD.
- Reapply insect repellent as directed.
- Apply sunscreen before insect repellent.
- Do not apply repellent directly to a child's face. Spray it into your hand first, then apply.

Treatment

There is no vaccine to prevent Zika virus infection, nor any medicine to treat it.

If you are ill, protect yourself from mosquito bites. If a mosquito bites you, it can spread the virus and infect others.



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www.nola.gov/health



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Everything you need to know about Zika Virus Information for Pets



On January 15, 2016, the Centers for Disease Control and Prevention (CDC) issued a travel alert for people traveling to regions where Zika virus transmission is ongoing. Pregnant women in any trimester should consider postponing travel to the areas where Zika virus transmission is ongoing. **There are travel-related cases in New Orleans but no locally transmitted cases.**

Currently the City of New Orleans Mosquito and Termite Control Board (NOMTCB) and the New Orleans Health Department (NOHD) are working with partners to provide you with information about Zika. NOTCMB is monitoring the mosquito population. Mitigation efforts to limit the mosquito population will utilize a combination of chemical control and habitat reduction methods as needed.

What is Zika?



Zika virus disease (Zika) is a disease spread to people primarily through the bite of an infected mosquito. It can also spread when an infected man has sex with his partner. Most people with Zika do not know they have it. Symptoms are usually mild, lasting about a week.

Common Symptoms: Fever, rash, joint pain, and conjunctivitis (red eyes). Other symptoms include headache and muscle pain.

If you develop symptoms within 2 weeks of travel, see a doctor and tell the doctor where you traveled.

Pregnancy and Zika Virus



Zika can be spread from a mother to her fetus during pregnancy. There have been reports to a serious birth defect of the brain called microcephaly in babies of mothers who had Zika virus while pregnant.

Travel Information for women who are pregnant or thinking of becoming pregnant:

- ✈ Consider postponing travel to any area where Zika virus transmission is ongoing.
- ✈ If you must travel to one of these areas, talk to your doctor first and strictly follow steps to prevent mosquito bites during your trip.
- ✈ It is safe for pregnant and breastfeeding women to use insect repellent.

Microcephaly is a birth defect where a baby's head is smaller than expected when compared to babies that are the same sex and age. Babies with microcephaly often have smaller brains that may not have developed properly.

Travel Advisory

Level 2:

Practice Enhanced Precautions

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Pets

There is no evidence that Zika virus is spread to people from contact with animals. Animals in the United States are not at risk of becoming sick with Zika virus.

How to protect yourself



Cover your skin by wearing long-sleeve shirts and long pants. For extra protection, treat clothing with the permethrin insect repellent.



Remove standing water around the home in places such as plant containers, tires, pet dishes and buckets.



Daytime is when mosquitoes that spread Zika virus are most aggressive, but they can also bite at dawn and dusk.



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- Reapply insect repellent as directed.
- Apply sunscreen before insect repellent.
- Do not apply repellent directly to a child's face. Spray it into your hand first, then apply.



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Everything you need to know about

Zika Virus

Information for Pregnant Women



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Currently the City of New Orleans Mosquito and Termite Control Board (NOMTCB) and the New Orleans Health Department (NOHD) are working with partners to provide you with information about Zika. NOTCMB is monitoring the mosquito population. Mitigation efforts to limit the mosquito population will utilize a combination of chemical control and habitat reduction methods as needed.

What is Zika?



Zika virus disease (Zika) is a disease spread to people primarily through the bite of an infected mosquito. It can also spread when an infected man has sex with his partner. Most people with Zika do not know they have it. Symptoms are usually mild, lasting about a week.

Common Symptoms: Fever, rash, joint pain, and conjunctivitis (red eyes). Other symptoms include headache and muscle pain.




If you develop symptoms within 2 weeks of travel, see a doctor and tell the doctor where you traveled.

Pregnancy and Zika Virus



Zika can be spread from a mother to her fetus during pregnancy. There have been reports to a serious birth defect of the brain called microcephaly in babies of mothers who had Zika virus while pregnant.

Travel Information for women who are pregnant or thinking of becoming pregnant:

-  Consider postponing travel to any area where Zika virus transmission is ongoing.
-  If you must travel to one of these areas, talk to your doctor first and strictly follow steps to prevent mosquito bites during your trip.
-  It is safe for pregnant and breastfeeding women to use insect repellent.

Microcephaly is a birth defect where a baby's head is smaller than expected when compared to babies that are the same sex and age. Babies with microcephaly often have smaller brains that may not have developed properly.

Travel Advisory

Level 2:

Practice Enhanced Precautions

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Visit cdc.gov/travel

How to protect yourself



Cover your skin by wearing long-sleeve shirts and long pants. For extra protection, treat clothing with the permethrin insect repellent.



Remove standing water around the home in places such as plant containers, tires, pet dishes and buckets.



Daytime is when mosquitoes that spread Zika virus are most aggressive, but they can also bite at dawn and dusk.



EPA-registered insect repellents

when used as directed, are proven safe and effective even for pregnant or breastfeeding women.

- Look for these ingredients: DEET, picaridin, IR3535, OLE, or PMD.
- Reapply insect repellent as directed.
- Apply sunscreen before insect repellent.
- Do not apply repellent directly to a child's face. Spray it into your hand first, then apply.

Do not have unprotected sex with a male partner who has recently traveled to or lived in a country with Zika.

If you have sex (vaginal, anal, or oral) you should use a condom the right way every time.

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Everything you need to know about

Zika Virus

Information for Travelers



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Currently the City of New Orleans Mosquito and Termite Control Board (NOMTCB) and the New Orleans Health Department (NOHD) are working with partners to provide you with information about Zika. NOTCMB is monitoring the mosquito population. Mitigation efforts to limit the mosquito population will utilize a combination of chemical control and habitat reduction methods as needed.

What is Zika?



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Common Symptoms: Fever, rash, joint pain, and conjunctivitis (red eyes). Other symptoms include headache and muscle pain.

If you develop symptoms within 2 weeks of travel, see a doctor and tell the doctor where you traveled.

Planning a trip



If you are planning a trip to an area with ongoing Zika virus transmission, you should protect yourself and your family from mosquito bites. There is no vaccine to prevent you from becoming infected.

If you are pregnant, you should consider postponing travel to the areas with ongoing transmission.

If you are thinking of becoming pregnant, talk to your doctor about travel plans.

Returning travelers



If you have recently returned from an area with ongoing virus transmission:

Men: Use condoms with sexual partners or abstain from sexual activity.

Pregnant women: Visit your doctor for follow up. Testing is recommended for women with symptoms within the first week of illness. Even if you do not have symptoms, you can be screened for Zika virus infection.

Travel Advisory

Level 2:

Practice Enhanced Precautions

For a list of affected countries:

Visit cdc.gov/travel

How to protect yourself



Cover your skin by wearing long-sleeve shirts and long pants. For extra protection, treat clothing with the permethrin insect repellent.



Remove standing water around the home in places such as plant containers, tires, pet dishes and buckets.



Daytime is when mosquitoes that spread Zika virus are most aggressive, but they can also bite at dawn and dusk.



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- Reapply insect repellent as directed.
- Apply sunscreen before insect repellent.
- Do not apply repellent directly to a child's face. Spray it into your hand first, then apply.

Stay in places with air conditioning or that use window and door screens to keep mosquitoes outside.

Sleep under a mosquito bed net if you are overseas or outside and are not able to protect yourself from mosquito bites.

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Everything you need to know about

Zika Virus

Information for Universities



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Currently the City of New Orleans Mosquito and Termite Control Board (NOMTCB) and the New Orleans Health Department (NOHD) are working with partners to provide you with information about Zika. NOTCMB is monitoring the mosquito population. Mitigation efforts to limit the mosquito population will utilize a combination of chemical control and habitat reduction methods as needed.

What is Zika?



Zika virus disease (Zika) is a disease spread to people primarily through the bite of an infected mosquito. It can also spread when an infected man has sex with his partner. Most people with Zika do not know they have it. Symptoms are usually mild, lasting about a week.

Common Symptoms: Fever, rash, joint pain, and conjunctivitis (red eyes). Other symptoms include headache and muscle pain.

If you develop symptoms within 2 weeks of travel, see a doctor and tell the doctor where you traveled.

Tips for traveling students



Students planning a trip to an area with ongoing Zika virus transmission should protect themselves and family from mosquito bites. There is no vaccine to prevent Zika. If a student is pregnant, she should consider postponing travel to the areas with ongoing transmission.

Students who are thinking of becoming pregnant should talk to her doctor about travel plans.

Returning travelers



If a student has recently returned from an area with ongoing virus transmission, he or she should:

Men: Use condoms with sexual partners or abstain from sexual activity.

Pregnant women: Visit your doctor for follow up. Testing is recommended for women with symptoms within the first week of illness. Even if you do not have symptoms, you can be screened for Zika virus infection.

Travel Advisory

Level 2:

Practice Enhanced Precautions

For a list of affected countries:

Visit cdc.gov/travel

How to protect yourself



Cover your skin by wearing long-sleeve shirts and long pants. For extra protection, treat clothing with the permethrin insect repellent.



Remove standing water around the home in places such as plant containers, tires, pet dishes and buckets.



Daytime is when mosquitoes that spread Zika virus are most aggressive, but they can also bite at dawn and dusk.



EPA-registered insect repellents

when used as directed, are proven safe and effective even for pregnant or breastfeeding women.

- Look for these ingredients: DEET, picaridin, IR3535, OLE, or PMD.
- Reapply insect repellent as directed.
- Apply sunscreen before insect repellent.
- Do not apply repellent directly to a child's face. Spray it into your hand first, then apply.

Stay in places with air conditioning or that use window and door screens to keep mosquitoes outside.

Sleep under a mosquito bed net if you are overseas or outside and are not able to protect yourself from mosquito bites.



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Everything you need to know about Zika Virus Information for Businesses



On January 15, 2016, the Centers for Disease Control and Prevention (CDC) issued a travel alert for people traveling to regions where Zika virus transmission is ongoing. Pregnant women in any trimester should consider postponing travel to the areas where Zika virus transmission is ongoing. **There are travel-related cases in New Orleans but no locally transmitted cases.**

Currently the City of New Orleans Mosquito and Termite Control Board (NOMTCB) and the New Orleans Health Department (NOHD) are working with partners to provide you with information about Zika. NOTCMB is monitoring the mosquito population. Mitigation efforts to limit the mosquito population will utilize a combination of chemical control and habitat reduction methods as needed.

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Common Symptoms: Fever, rash, joint pain, and conjunctivitis (red eyes). Other symptoms include headache and muscle pain.

If you develop symptoms within 2 weeks of travel, see a doctor, and tell the doctor where you traveled.

Planning a trip



If you are planning a trip to an area with ongoing Zika virus transmission, you should protect yourself and your family from mosquito bites. There is no vaccine to prevent you from becoming infected.

If you are pregnant, you should consider postponing travel to the areas with ongoing transmission.

If you are thinking of becoming pregnant, talk to your doctor about travel plans.

Returning workers



If you have recently returned from an area with ongoing virus transmission:

Men: Use condoms with sexual partners or abstain from sexual activity.

Pregnant women: Visit your doctor for follow up. Testing is recommended for women with symptoms within the first week of illness. Even if you do not have symptoms, you can be screened for Zika virus infection.

Travel Advisory

Level 2:

Practice Enhanced Precautions

For a list of affected countries:
Visit cdc.gov/travel

How to protect yourself



Cover your skin by wearing long-sleeve shirts and long pants. For extra protection, treat clothing with the permethrin insect repellent.



Remove standing water around the building in places such as plant containers, outdoor toys, playsets, pools or trash containers.



Daytime Mosquitoes that spread Zika virus are aggressive daytime biters, but they can also bite at dawn and dusk.



EPA-registered insect repellents when used as directed, are proven safe and effective even for pregnant or breastfeeding women.

- Look for these ingredients: DEET, picaridin, IR3535, OLE, or PMD.
- Reapply insect repellent as directed.
- Apply sunscreen before insect repellent.

Stay in places with air conditioning or that use window and door screens to keep mosquitoes outside.

Sleep under a mosquito bed net if you are overseas or outside and are not able to protect yourself from mosquito bites.



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Everything you need to know about Zika Virus

Information for Military



On January 15, 2016, the Centers for Disease Control and Prevention (CDC) issued a travel alert for people traveling to regions where Zika virus transmission is ongoing. Pregnant women in any trimester should consider postponing travel to the areas where Zika virus transmission is ongoing. **There are travel-related cases in New Orleans but no locally transmitted cases.**

Currently the City of New Orleans Mosquito and Termite Control Board (NOMTCB) and the New Orleans Health Department (NOHD) are working with partners to provide you with information about Zika. NOTCMB is monitoring the mosquito population. Mitigation efforts to limit the mosquito population will utilize a combination of chemical control and habitat reduction methods as needed.

What is Zika



Zika virus disease (Zika) is a disease spread to people primarily through the bite of an infected mosquito. It can also spread when an infected man has sex with his partner. Most people with Zika do not know they have it. Symptoms are usually mild, lasting about a week.

Common Symptoms: Fever, rash, joint pain, and conjunctivitis (red eyes). Other symptoms include headache and muscle pain.

If you develop symptoms within 2 weeks of travel, see a doctor and tell the doctor where you traveled.

Planning a trip



If you are planning a trip to an area with ongoing Zika virus transmission, you should protect yourself and your family from mosquito bites. There is no vaccine to prevent you from becoming infected.

If you are pregnant, you should consider postponing travel to the areas with ongoing transmission.

If you are thinking of becoming pregnant, talk to your doctor about travel plans.

Returning travelers



If you have recently returned from an area with ongoing virus transmission:

Men: Use condoms with sexual partners or abstain from sexual activity.

Pregnant women: Visit your doctor for follow up. Testing is recommended for women with symptoms within the first week of illness. Even if you do not have symptoms, you can be screened for Zika virus infection.

Travel Advisory

Level 2:
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Visit cdc.gov/travel

How to protect yourself



Cover your skin by wearing long-sleeve shirts and long pants. For extra protection, treat clothing with the permethrin insect repellent.



Remove standing water around the home in places such as plant containers, tires, pet dishes and buckets.



Daytime is when mosquitoes that spread Zika virus are aggressive daytime biters, but they can also bite at dawn and dusk.



EPA-registered insect repellents when used as directed, are proven safe and effective even for pregnant or breastfeeding women.

- Look for these ingredients: DEET, picaridin, IR3535, OLE, or PMD.
- Reapply insect repellent as directed.
- Apply sunscreen before insect repellent.
- Do not apply repellent directly to a child's face. Spray it into your hand first, then apply.

Stay in places with air conditioning or that use window and door screens to keep mosquitoes outside.

Sleep under a mosquito bed net if you are overseas or outside and are not able to protect yourself from mosquito bites.



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Everything you need to know about Zika Virus

Information for Missionaries



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Common Symptoms: Fever, rash, joint pain, and conjunctivitis (red eyes). Other symptoms include headache and muscle pain.

If you develop symptoms within 2 weeks of travel, see a doctor and tell the doctor where you traveled.

Planning a trip



If you are planning a trip to an area with ongoing Zika virus transmission, you should protect yourself and your family from mosquito bites. There is no vaccine to prevent you from becoming infected.

If you are pregnant, you should consider postponing travel to the areas with ongoing transmission.

If you are thinking of becoming pregnant, talk to your doctor about travel plans.

Returning travelers



If you have recently returned from an area with ongoing virus transmission:

Men: Use condoms with sexual partners or abstain from sexual activity.

Pregnant women: Visit your doctor for follow up. Testing is recommended for women with symptoms within the first week of illness. Even if you do not have symptoms, you can be screened for Zika virus infection.

Travel Advisory

Level 2:

Practice Enhanced Precautions

For a list of affected countries:

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How to protect yourself



Cover your skin by wearing long-sleeve shirts and long pants. For extra protection, treat clothing with the permethrin insect repellent.



Remove standing water around the home in places such as plant containers, tires, pet dishes and buckets.



Daytime is when mosquitoes that spread Zika virus are aggressive daytime biters, but they can also bite at dawn and dusk.



EPA-registered insect repellents

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- Reapply insect repellent as directed.
- Apply sunscreen before insect repellent.
- Do not apply repellent directly to a child's face. Spray it into your hand first, then apply.

Stay in places with air conditioning or that use window and door screens to keep mosquitoes outside.

Sleep under a mosquito bed net if you are overseas or outside and are not able to protect yourself from mosquito bites.



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Everything you need to know about Zika Virus For Healthcare Providers



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Currently the City of New Orleans Mosquito and Termite Control Board (NOMTCB) and the New Orleans Health Department (NOHD) are working with partners to provide you with information about Zika. NOTCMB is monitoring the mosquito population. Mitigation efforts to limit the mosquito population will utilize a combination of chemical control and habitat reduction methods as needed.

What is Zika?



Zika virus disease (Zika) is a disease spread to people primarily through the bite of an infected mosquito. It can also spread when an infected man has sex with his partner. Most people with Zika do not know they have it. Symptoms are usually mild, lasting about a week.

Common Symptoms: Fever, rash, joint pain, and conjunctivitis (red eyes). Other symptoms include headache and muscle pain.

If you see patients with the symptoms ask them where they have traveled.

Diagnostic testing

Preliminary diagnosis is based on the patient's clinical features, places and dates of travel and activities. Acute Zika virus disease should be suspected if the patient:

- 1) Traveled to or resided in an area with ongoing transmission of Zika virus within the past 2 weeks
- 2) Displays more than two symptoms

There are no commercially available diagnostic tests for Zika disease. Zika virus testing is performed by the CDC.

As an arboviral disease, Zika virus is a nationally notifiable condition. Healthcare providers are encouraged to report suspected cases to DHH to facilitate diagnosis and mitigate the risk of local transmission.

Treatment involves supportive care; Aspirin and other non-steroidal anti-inflammatory drugs (NSAIDs) should be avoided until dengue can be ruled out to reduce risk of hemorrhage.

Report any suspected cases to DHH for testing.

Report Suspected Cases

Report to Louisiana Department of Health and Hospitals Infectious Disease Epidemiology Section at:
Main line: (504)568-8313
After Hours: (800)256-2748

How to protect yourself



Cover your skin by wearing long-sleeve shirts and long pants. For extra protection, treat clothing with the permethrin insect repellent.



Remove standing water around the home in places such as plant containers, tires, pet dishes and buckets.



Daytime is when mosquitoes that spread Zika virus are aggressive daytime biters, but they can also bite at dawn and dusk.



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- Apply sunscreen before insect repellent.
- Do not apply repellent directly to a child's face. Spray it into your hand first, then apply.

Travel information

Pregnant women should consider postponing travel to any area where Zika virus transmission is ongoing.

If a patient must travel to one of these areas, they should strictly follow steps to prevent mosquito bites. It is safe for pregnant women to use insect repellent.



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Everything you need to know about Zika Virus Information for OB/GYN



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Common Symptoms: Fever, rash, joint pain, and conjunctivitis (red eyes). Other symptoms include headache and muscle pain.

There have been serious reports of a birth defect of the brain called microcephaly and other poor pregnancy outcomes of mothers who were infected with Zika virus while pregnant.

Evaluating and testing patients

Women who have traveled to an area with ongoing Zika virus transmission during pregnancy and reported two or more symptoms within two weeks of travel should be evaluated for Zika virus infection and tested in accordance with CDC Interim Guidance.

Zika virus infections have been confirmed in infants with microcephaly, but this association is under investigation.

Women with recent travel to an area with ongoing Zika virus transmission and ultrasound findings of microcephaly or intracranial calcifications may be offered amniocentesis.

A positive Zika virus result from amniotic fluid would be suggestive of intrauterine infection. In the absence of microcephaly, the presence of intracranial calcifications before 22 weeks gestation may suggest a risk for the future development of microcephaly.

The CDC recommends testing tissues of live births and fetal loss with evidence of maternal or fetal Zika virus infection.

Report any suspected cases to DHH for testing.

Report Suspected Cases

Report to Louisiana Department of Health and Hospitals Infectious Disease Epidemiology Section at:
Main line: (504)568-8313
After Hours: (800)256-2748

How to protect yourself



Cover your skin by wearing long-sleeve shirts and long pants. For extra protection, treat clothing with the permethrin insect repellent.



Remove standing water around the home in places such as plant containers, tires, pet dishes and buckets.



Daytime is when mosquitoes that spread Zika virus are most aggressive, but they can also bite at dawn and dusk.



EPA-registered insect repellents when used as directed, are proven safe and effective even for pregnant or breastfeeding women.

- Look for these ingredients: DEET, picaridin, IR3535, OLE, or PMD.
- Reapply insect repellent as directed.
- Apply sunscreen before insect repellent.
- Do not apply repellent directly to a child's face. Spray it into your hand first, then apply.

Travel information

Pregnant women should consider postponing travel to any area where Zika virus transmission is ongoing.

If a patient must travel to one of these areas, they should strictly follow steps to prevent mosquito bites. It is safe for pregnant women to use insect repellent.



Icons retrieved from noun project.

Everything you need to know about Zika Virus For Pediatricians



On January 15, 2016, the Centers for Disease Control and Prevention (CDC) issued a travel alert for people traveling to regions where Zika virus transmission is ongoing. Pregnant women in any trimester should consider postponing travel to the areas where Zika virus transmission is ongoing. **There are travel-related cases in New Orleans but no locally transmitted cases.**

Currently the City of New Orleans Mosquito and Termite Control Board (NOMTCB) and the New Orleans Health Department (NOHD) are working with partners to provide you with information about Zika. NOTCMB is monitoring the mosquito population. Mitigation efforts to limit the mosquito population will utilize a combination of chemical control and habitat reduction methods as needed.

What is Zika?



Zika virus disease (Zika) is a disease spread to people primarily through the bite of an infected mosquito. It can also spread when an infected man has sex with his partner. Most people with Zika do not know they have it. Symptoms are usually mild, lasting about a week.

Common Symptoms: Fever, rash, joint pain, and conjunctivitis (red eyes). Other symptoms include headache and muscle pain.

There have been serious reports of a serious birth defect of the brain called microcephaly and other poor pregnancy outcomes of mothers who were infected with Zika virus while pregnant.

Children and infants

Acute Zika virus disease should be suspected in an infant or child under 18 years who:

- 1) Traveled to or resided in an area with ongoing transmission of Zika virus within the past 2 weeks
- 2) Displays more than two symptoms

Zika virus testing is recommended within 48 hours of birth for infants with microcephaly or intracranial calcifications and whose mothers have a history of travel to or who reside in areas with ongoing transmission of Zika virus.

Microcephaly is a birth defect where a baby's head is smaller than expected when compared to babies of the same sex and age. Babies with microcephaly often have smaller brains that may not have developed properly.

Treatment involves supportive care; aspirin and other NSAIDs should be avoided until dengue can be ruled out to reduce risk of hemorrhage.

Report any suspected cases to DHH for testing.

Report Suspected Cases

Report to Louisiana Department of Health and Hospitals Infectious Disease Epidemiology at:
Main Line: 504-568-8313
After Hours: 800-256-2748

Tips for patients



Cover your skin by wearing long-sleeve shirts and long pants. For extra protection, treat clothing with the permethrin insect repellent.



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- Reapply insect repellent as directed.
- Apply sunscreen before insect repellent.
- Do not apply repellent directly to a child's face. Spray it into your hand first, then apply.

Travel information



Pregnant women should consider postponing travel to any area where Zika virus transmission is ongoing.

If a patient must travel to one of these areas, they should strictly follow steps to prevent mosquito bites. It is safe for pregnant women to use insect repellent.



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Zika Fact Sheets (Local Transmission)

Everything you need to know about Zika Virus



There is local transmission of Zika by infected mosquitoes.

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What is Zika?



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Common Symptoms: Fever, rash, joint pain, and conjunctivitis (red eyes). Other symptoms include headache and muscle pain.

Visit your healthcare provider if you develop symptoms.

Stop the spread



If you have Zika and a mosquito bites you, it can pass Zika to other people. Following mosquito protection tips will help stop the spread of Zika.

If you have Zika, it is important to use insect repellent and use condoms when you have sex.

Anyone concerned about getting Zika from sex can use condoms. If you have sex (vaginal, anal, or oral) you should use a condom the right way every time.

Treatment



There is no vaccine to prevent or specific medicine to treat Zika infections.

You can treat the symptoms:

- Get plenty of rest.
- Drink fluids to prevent dehydration.
- Take medicine like acetaminophen (Tylenol) to relieve fever and pain. Do not take aspirin or NSAID drugs.

For More Information

If you have questions about mosquitoes or Zika, call 311 for further information and assistance.

How to protect yourself



Cover your skin by wearing long-sleeve shirts and long pants. For extra protection, treat clothing with the permethrin insect repellent.



Remove standing water around the home in places such as plant containers, tires, pet dishes and buckets.



Daytime is when mosquitoes that spread Zika virus are most aggressive, but they can also bite at dawn and dusk.



EPA-registered insect repellents when used as directed, are proven safe and effective even for pregnant or breastfeeding women.

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- Reapply insect repellent as directed.
- Apply sunscreen before insect repellent.
- Do not apply repellent directly to a child's face. Spray it into your hand first, then apply.

Pregnant Women

Zika is linked to birth defects. If you think you or your male partner have or has had Zika, tell your healthcare provider.



Icons retrieved from noun project.

Everything you need to know about

Zika Virus For Pet Owners



There is local transmission of Zika by infected mosquitoes.

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What is Zika?



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Common Symptoms: Fever, rash, joint pain, and conjunctivitis (red eyes). Other symptoms include headache and muscle pain.

Visit your healthcare provider if you develop symptoms.

Stop the spread



If you have Zika and a mosquito bites you, it can pass Zika to other people. Following mosquito protection tips will help stop the spread of Zika.

If you have Zika, it is important to use insect repellent and use condoms when you have sex.

Anyone concerned about getting Zika from sex can use condoms. If you have sex (vaginal, anal, or oral) you should use a condom the right way every time.

Treatment



There is no vaccine to prevent or specific medicine to treat Zika infections.

You can treat the symptoms:

- Get plenty of rest.
- Drink fluids to prevent dehydration.
- Take medicine like acetaminophen (Tylenol) to relieve fever and pain. Do not take aspirin or NSAID drugs.

For More Information

If you have questions about mosquitoes or Zika, call 311 for further information and assistance.

How to protect yourself



Cover your skin by wearing long-sleeve shirts and long pants. For extra protection, treat clothing with the permethrin insect repellent.



Remove standing water around the home in places such as plant containers, tires, pet dishes and buckets.



Daytime is when mosquitoes that spread Zika virus are aggressive daytime biters, but they can also bite at dawn and dusk.



EPA-registered insect repellents when used as directed, are proven safe and effective even for pregnant or breastfeeding women.

- Look for these ingredients: DEET, picaridin, IR3535, OLE, or PMD.
- Reapply insect repellent as directed.
- Apply sunscreen before insect repellent.
- Do not apply repellent directly to a child's face. Spray it into your hand first, then apply.

Pets

There is no evidence that Zika virus is spread to people from contact with animals.

Wear long-sleeve shirts, long pants, and apply insecticide while walking or interacting with pets outside during dawn and dusk.



Icons retrieved from noun project.

Everything you need to know about

Zika Virus

For Pregnant Women



There is local transmission of Zika by infected mosquitoes.

Currently the City of New Orleans Mosquito and Termite Control Board (NOMTCB) and the New Orleans Health Department (NOHD) are working with partners to provide you with information about Zika. NOTCMB is monitoring the mosquito population. Mitigation efforts to limit the mosquito population will utilize a combination of chemical control and habitat reduction methods as needed.

What is Zika?



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Common Symptoms: Fever, rash, joint pain, and conjunctivitis (red eyes). Other symptoms include headache and muscle pain.

Visit your healthcare provider if you develop symptoms.

Pregnancy and Zika Virus



Zika can be spread from a mother to her fetus during pregnancy. There have been reports to a serious birth defect of the brain called microcephaly in babies of mothers who had Zika virus while pregnant.

Microcephaly is a birth defect where a baby's head is smaller than expected when compared to babies that are the same sex and age. Babies with microcephaly often have smaller brains that might not have developed properly.

To prevent the spread of Zika, do not have unprotected sex with a male partner. If you have sex (vaginal, anal, or oral) you should use a condom the right way every time.

Treatment



There is no vaccine to prevent or specific medicine to treat Zika infections.

You can treat the symptoms:

- Get plenty of rest
- Drink fluids to prevent dehydration
- Take medicine like acetaminophen (Tylenol) to relieve fever and pain. Do not take aspirin or NSAID drugs.

For More Information

If you have questions about mosquitoes or Zika call 311 for further information and assistance.

How to protect yourself



Cover your skin by wearing long-sleeve shirts and long pants. For extra protection, treat clothing with the permethrin insect repellent.



Remove standing water around the home in places such as plant containers, tires, pet dishes and buckets.



Daytime is when mosquitoes that spread Zika virus are most aggressive, but they can also bite at dawn and dusk.



EPA-registered insect repellents when used as directed, are proven safe and effective even for pregnant or breastfeeding women.

- Look for these ingredients: DEET, picaridin, IR3535, OLE, or PMD.
- Reapply insect repellent as directed.
- Apply sunscreen before insect repellent.
- Do not apply repellent directly to a child's face. Spray it into your hand first, then apply.

How to stop the spread of Zika

If you have Zika and a mosquito bites you, it can pass Zika to other people. If you have Zika, it is important to use insect repellent and use condoms when you have sex.



Icons retrieved from noun project.

Everything you need to know about Zika Virus For Schools



There is local transmission of Zika by infected mosquitoes.

Currently the City of New Orleans Mosquito and Termite Control Board (NOMTCB) and the New Orleans Health Department (NOHD) are working with partners to provide you with information about Zika. NOTCMB is monitoring the mosquito population. Mitigation efforts to limit the mosquito population will utilize a combination of chemical control and habitat reduction methods as needed.

What is Zika?



Zika virus disease (Zika) is a disease spread to people primarily through the bite of an infected mosquito. It can also spread when an infected man has sex with his partner. Most people with Zika do not know they have it. Symptoms are usually mild, lasting about a week.

Common Symptoms: Fever, rash, joint pain, and conjunctivitis (red eyes). Other symptoms include headache and muscle pain.

Visit your healthcare provider if you develop symptoms.

Stop the spread



If you have Zika and a mosquito bites you, it can pass Zika to other people. Following mosquito protection tips will help stop the spread of Zika.

- Encourage parents and students to bring bug spray so it can be put on before recess.
- Minimize students' time outside during early morning and early evening. This may include ending outdoor recess or after school activities to lessen exposure to mosquitoes.

Treatment



There is no vaccine to prevent or specific medicine to treat Zika infections.

You can treat the symptoms:

- Get plenty of rest.
- Drink fluids to prevent dehydration.
- Take medicine like acetaminophen (Tylenol) to relieve fever and pain. Do not take aspirin or NSAID drugs.

For More Information

If you have questions about mosquitoes or Zika, call 311 for further information and assistance.

How to protect yourself



Cover your skin by wearing long-sleeve shirts and long pants. For extra protection, treat clothing with the permethrin insect repellent.



Remove standing water around the building in places such as plant containers, outdoor toys, playsets, pools or trash containers.



Daytime Mosquitoes that spread Zika virus are aggressive daytime biters, but they can also bite at dawn and dusk.



EPA-registered insect repellents

when used as directed, are proven safe and effective even for pregnant or breastfeeding women.

- Look for these ingredients: DEET, picaridin, IR3535, OLE, or PMD.
- Reapply insect repellent as directed.
- Apply sunscreen before insect repellent.

How to apply repellent to children

- Do not apply repellent directly to a child's face. Spray it into your hand first, then apply.
- Do not use repellent on babies younger than 2 months old.
- Do not use products containing oil of lemon, eucalyptus or para-menthane-diol on children younger than 3 years old.



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Dial 311

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Everything you need to know about Zika Virus For Outdoor Workers



There is local transmission of Zika by infected mosquitoes.

Currently the City of New Orleans Mosquito and Termite Control Board (NOMTCB) and the New Orleans Health Department (NOHD) are working with partners to provide you with information about Zika. NOTCMB is monitoring the mosquito population. Mitigation efforts to limit the mosquito population will utilize a combination of chemical control and habitat reduction methods as needed.

What is Zika?



Zika virus disease (Zika) is a disease spread to people primarily through the bite of an infected mosquito. It can also spread when an infected man has sex with his partner. Most people with Zika do not know they have it. Symptoms are usually mild, lasting about a week.

Common Symptoms: Fever, rash, joint pain, and conjunctivitis (red eyes). Other symptoms include headache and muscle pain.

Visit your healthcare provider if you develop symptoms.

Stop the spread



If you have Zika and a mosquito bites you, it can pass Zika to other people. Following mosquito protection tips will help stop the spread of Zika.

At greatest risk are individuals who are outdoors when mosquitoes are most active: at dawn, sunset and early evening.

Wear protective clothing and use recommended insect repellents, especially during peak mosquito activity times.

Treatment



There is no vaccine to prevent or specific medicine to treat Zika infections.

You can treat the symptoms:

- Get plenty of rest.
- Drink fluids to prevent dehydration.
- Take medicine like acetaminophen (Tylenol) to relieve fever and pain. Do not take aspirin or NSAID drugs.

For More Information

If you have questions about mosquitoes or Zika, call 311 for further information and assistance.

How to protect yourself



Cover your skin by wearing long-sleeve shirts and long pants. For extra protection, treat clothing with the permethrin insect repellent.



Remove standing water Employers should eliminate as many sources of standing water as possible.



Daytime is when mosquitoes that spread Zika virus are aggressive daytime biters, but they can also bite at dawn and dusk.

- When possible, schedule work so employees are not outdoors when mosquitoes are most active: between dawn and dusk.



EPA-registered insect repellents when used as directed, are proven safe and effective.

- Make insect repellents available to workers.
- Look for these ingredients: DEET, picaridin, IR3535, OLE, or PMD.
- Repellents with DEET or permethrin can be used on the clothing.
- Permethrin should not be used directly on skin.
- Reapply insect repellent as directed.
- Apply sunscreen before insect repellent.



Icons retrieved from noun project.

Everything you need to know about Zika Virus For Outdoor Activities



There is local transmission of Zika by infected mosquitoes.

Currently the City of New Orleans Mosquito and Termite Control Board (NOMTCB) and the New Orleans Health Department (NOHD) are working with partners to provide you with information about Zika. NOTCMB is monitoring the mosquito population. Mitigation efforts to limit the mosquito population will utilize a combination of chemical control and habitat reduction methods as needed.

What is Zika?



Zika virus disease (Zika) is a disease spread to people primarily through the bite of an infected mosquito. It can also spread when an infected man has sex with his partner. Most people with Zika do not know they have it. Symptoms are usually mild, lasting about a week.

Common Symptoms: Fever, rash, joint pain, and conjunctivitis (red eyes). Other symptoms include headache and muscle pain.

Visit your healthcare provider if you develop symptoms.

How does it spread?



If you have Zika and a mosquito bites you, it can pass Zika to other people. Following mosquito protection tips will help stop the spread of Zika.

Anyone concerned about getting Zika from sex can use condoms. If you have sex (vaginal, anal, or oral) you should use a condom the right way every time.

Stop the Spread



As a recreational facility you can:

- Suspend activities during peak mosquito biting times of dawn and dusk.
- Encourage use of EPA approved bug spray products.
- Keep swimming pools clean and properly chlorinated.
- Remove standing water from pool covers.
- Use landscaping to keep standing water from collecting on the property.

For More Information

If you have questions about mosquitoes or Zika call 311 for further information and assistance.

How to protect yourself



Cover your skin by wearing long-sleeve shirts and long pants. For extra protection, treat clothing with the permethrin insect repellent.



Remove standing water around the home in places such as plant containers, tires, pet dishes and buckets.



Daytime is when mosquitoes that spread Zika virus are most aggressive, but they can also bite at dawn and dusk.



EPA-registered insect repellents when used as directed, are proven safe and effective even for pregnant or breastfeeding women.

- Look for these ingredients: DEET, picaridin, IR3535, OLE, or PMD.
- Reapply insect repellent as directed.
- Apply sunscreen before insect repellent.
- Do not apply repellent directly to a child's face. Spray it into your hand first, then apply.

Pregnant Women

Zika is linked to birth defects. If you think you or your male partner may have or had Zika, tell your healthcare provider.



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Everything you need to know about Zika Virus Neighborhood Associations



There is local transmission of Zika by infected mosquitoes.

Currently the City of New Orleans Mosquito and Termite Control Board (NOMTCB) and the New Orleans Health Department (NOHD) are working with partners to provide you with information about Zika. NOTCMB is monitoring the mosquito population. Mitigation efforts to limit the mosquito population will utilize a combination of chemical control and habitat reduction methods as needed.

What is Zika?



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Common Symptoms: Fever, rash, joint pain, and conjunctivitis (red eyes). Other symptoms include headache and muscle pain.

Visit your healthcare provider if you develop symptoms.

How does it spread?

If you have Zika and a mosquito bites you, it can pass Zika to other people. Following mosquito protection tips will help stop the spread of Zika.

Anyone concerned about getting Zika from sex can use condoms. If you have sex (vaginal, anal, or oral) you should use a condom the right way every time.

Protect your neighborhood



You can help stop the spread of Zika by protecting your home and yard from mosquitoes. Make sure you:

- Throw away or regularly empty any containers that can hold water (tires, buckets, tarps, etc.).
- Do not let water sit at the bottom of flower pots, in holes, in tree stumps, and other areas.
- Regularly clean your gutters.
- Have screens on your windows and doors.
- Maintain your lawn by cutting weeds and mowing.

For More Information

If you have questions about mosquitoes or Zika, call 311 for further information and assistance.

How to protect yourself



Cover your skin by wearing long-sleeve shirts and long pants. For extra protection, treat clothing with the permethrin insect repellent.



Remove standing water around the home in places such as plant containers, tires, pet dishes and buckets.



Daytime is when mosquitoes that spread Zika virus are aggressive daytime biters, but they can also bite at dawn and dusk.



EPA-registered insect repellents when used as directed, are proven safe and effective even for pregnant or breastfeeding women.

- Look for these ingredients: DEET, picaridin, IR3535, OLE, or PMD.
- Reapply insect repellent as directed.
- Apply sunscreen before insect repellent.
- Do not apply repellent directly to a child's face. Spray it into your hand first, then apply.

Pregnant Women

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Dial 311

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Everything you need to know about Zika Virus Homeless Providers



There is local transmission of Zika by infected mosquitoes.

Currently the City of New Orleans Mosquito and Termite Control Board (NOMTCB) and the New Orleans Health Department (NOHD) are working with partners to provide you with information about Zika. NOTCMB is monitoring the mosquito population. Mitigation efforts to limit the mosquito population will utilize a combination of chemical control and habitat reduction methods as needed.

What is Zika?



Zika virus disease (Zika) is a disease spread to people primarily through the bite of an infected mosquito. It can also spread when an infected man has sex with his partner. Most people with Zika do not know they have it. Symptoms are usually mild, lasting about a week.

Common Symptoms: Fever, rash, joint pain, and conjunctivitis (red eyes). Other symptoms include headache and muscle pain.

Visit your healthcare provider if you develop symptoms.

Information for homeless providers

People who live outside are at high risk of Zika infection. Homeless providers can help stop the spread of Zika by taking these steps:

- Promote the use of insect repellents. Permethrin can be used on clothes. An application of permethrin on clothes can last up to 6 weeks.
- Promote use of condoms during vaginal, anal or oral sex.
- Refer any pregnant women who are living outside to a doctor.

Treatment



There is no vaccine to prevent or specific medicine to treat Zika infections.

You can treat the symptoms:

- Get plenty of rest.
- Drink fluids to prevent dehydration.
- Take medicine like acetaminophen (Tylenol) to relieve fever and pain. Do not take aspirin or NSAID drugs.

For More Information

If you have questions about mosquitoes or Zika, call 311 for further information and assistance.

How to protect yourself



Cover your skin by wearing long-sleeve shirts and long pants. For extra protection, treat clothing with the permethrin insect repellent.



Remove standing water around the home in places such as plant containers, tires, pet dishes and buckets.



Daytime is when mosquitoes that spread Zika virus are aggressive daytime biters, but they can also bite at dawn and dusk.



EPA-registered insect repellents when used as directed, are proven safe and effective even for pregnant or breastfeeding women.

- Look for these ingredients: DEET, picaridin, IR3535, OLE, or PMD.
- Reapply insect repellent as directed.
- Apply sunscreen before insect repellent.
- Do not apply repellent directly to a child's face. Spray it into your hand first, then apply.

Pregnant Women

Zika is linked to birth defects. If you think you or your male partner have or has had Zika, tell your healthcare provider.



Icons retrieved from noun project.

Everything you need to know about Zika Virus For Healthcare Providers



There is local transmission of Zika by infected mosquitoes.

Currently the City of New Orleans Mosquito and Termite Control Board (NOMTCB) and the New Orleans Health Department (NOHD) are working with partners to provide you with information about Zika. NOTCMB is monitoring the mosquito population. Mitigation efforts to limit the mosquito population will utilize a combination of chemical control and habitat reduction methods as needed.

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Common Symptoms: Fever, rash, joint pain, and conjunctivitis (red eyes). Other symptoms include headache and muscle pain.

Visit your healthcare provider if you develop symptoms.

Diagnostic Testing

Preliminary diagnosis is based on the patients clinical features, places and dates of travel and activities. You may test asymptomatic pregnant women.

There are no commercially available diagnostic tests for Zika disease. Zika virus testing is performed by DHH and CDC.

As an arboviral disease, Zika virus is a nationally notifiable condition. Healthcare providers are encouraged to report suspected cases to DHH to facilitate testing and mitigate the risk of local transmission.

Contact DHH for testing of any suspected cases.

Treatment



There is no vaccine to prevent or specific medicine to treat Zika infections. Treatment involves supportive care; Aspirin and other non-steroidal anti-inflammatory drugs (NSAIDs) should be avoided until dengue can be ruled out to reduce risk of hemorrhage.

Report Suspected Cases

Report to Louisiana Department of Health and Hospitals Infectious Disease Epidemiology Section at:
Main line: (504)568-8313
After Hours: (800)256-2748

Patient Talking Points

Encourage all patients to follow mosquito prevention tips. It is safe for pregnant women to use insect repellent.

Advise men who may have been exposed to or had Zika to use condoms or abstain from sexual contact with their partner.

How to protect yourself



Cover your skin by wearing long-sleeve shirts and long pants. For extra protection, treat clothing with the permethrin insect repellent.



Remove standing water around the home in places such as plant containers, tires, pet dishes and buckets.



Daytime is when mosquitoes that spread Zika virus are aggressive daytime biters, but they can also bite at dawn and dusk.



EPA-registered insect repellents

when used as directed, are proven safe and effective even for pregnant or breastfeeding women.

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Everything you need to know about Zika Virus For OB/GYN



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Common Symptoms: Fever, rash, joint pain, and conjunctivitis (red eyes). Other symptoms include headache and muscle pain.

Testing Pregnant Women



Pregnant women who reside in areas with active Zika virus transmission are at risk of Zika virus infection throughout their pregnancy.

For pregnant women with symptoms consistent with Zika, testing is recommended during the first week of illness.

- For asymptomatic pregnant women, IgM testing is recommended at the initiation of prenatal care with follow-up IgM testing mid-second trimester.
- If new symptoms consistent with Zika develop, a prior negative test for Zika does not rule out current infection. If new symptoms develop, a pregnant woman should be retested.

Laboratory evidence of maternal Zika virus infection can include Zika virus RNA detected by RT-PCR in any clinical specimen or positive Zika virus IgM with confirmatory neutralizing antibody titers that are ≥ 4 -fold higher than dengue virus neutralizing antibody titers in serum by PRNT.

Report Suspected Cases

Report to Louisiana Department of Health and Hospitals Infectious Disease Epidemiology Section at:
Main line: (504)568-8313
After Hours: (800)256-2748

How to protect yourself



Cover your skin by wearing long-sleeve shirts and long pants. For extra protection, treat clothing with the permethrin insect repellent.



Remove standing water around the home in places such as plant containers, tires, pet dishes and buckets.



Daytime is when mosquitoes that spread Zika virus are most aggressive, but they can also bite at dawn and dusk.



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- Reapply insect repellent as directed.
- Apply sunscreen before insect repellent.
- Do not apply repellent directly to a child's face. Spray it into your hand first, then apply.

Patient Talking Points

Encourage all patients to follow mosquito prevention tips. It is safe for pregnant women to use insect repellent.

Advise men who may have been exposed to or had Zika to use condoms or abstain from sexual contact with their partner.



Icons retrieved from noun project.

